# UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF MICHIGAN

UNITED STATES OF AMERICA,

Plaintiff,

and

NATURAL RESOURCES DEFENSE COUNCIL, INC. AND SIERRA CLUB,

Intervenor-Plaintiffs,

V.

DTE ENERGY COMPANY AND DETROIT EDISON COMPANY,

Defendants.

Civil Action No. 2:10-cv-13101-BAF-RSW

Judge Bernard A. Friedman

Magistrate Judge R. Steven Whalen

# DEFENDANTS' MOTION FOR SUMMARY JUDGMENT BASED ON THE 2002 NSR REFORM RULES

Pursuant to Fed. R. Civ. P. 56, Defendants DTE Energy Company and Detroit Edison Company, by counsel, hereby move for summary judgment. For the reasons set forth in the accompanying memorandum of law, Defendants are entitled to judgment as a matter of law as to each of EPA's claims in this action.

In accordance with Loc. R. 7.1(a)(2), counsel for Defendants conferred with counsel for EPA, and explained the nature of this motion and its legal basis. EPA did not concur in the relief sought.

Respectfully submitted this 9<sup>th</sup> day of June 2011.

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### **CERTIFICATE OF SERVICE**

I hereby certify that on June 9, 2011, the foregoing **DEFENDANTS' MOTION FOR SUMMARY JUDGMENT BASED ON THE 2002 NSR REFORM RULES** was served electronically only on the following attorneys of record in accordance with an agreement reached among the parties:

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DEFENDANTS' BRIEF IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT BASED ON THE 2002 NSR REFORM RULES

\*ORAL ARGUMENT REQUESTED\*

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### STATEMENT OF ISSUE PRESENTED

1. In 2002, EPA substantially reformed its rules governing NSR applicability. EPA confirmed that NSR is triggered only when the project in question *causes* an emissions increase and prescribed a common sense procedure for regulated entities to follow before undertaking construction of a project that the entity has concluded will not cause a significant increase in emissions. An operator like Detroit Edison that follows this procedure and submits the required notification to the regulating authority can commence construction without a permit in full compliance with the Clean Air Act and Michigan's NSR Rules. Should post-project emissions data, which the operator is required to monitor and report annually, show an increase, the source is subject to possible NSR permitting and enforcement *at that time*.

Detroit Edison complied with this procedure by submitting to MDEQ the required notification that it intended to undertake the three tube projects as part of the 2010 outage at Monroe Unit 2, and was thus allowed to commence work on these projects without an NSR permit.

Should judgment be entered in favor of Detroit Edison on EPA's claims that Detroit Edison violated the Clean Air Act and Michigan's rules by commencing construction on the 2010 outage projects without an NSR permit?

Defendants' Answer: Yes.

### **CONTROLLING OR OTHER APPROPRIATE AUTHORITY**

### Preamble to EPA's 1992 NSR Rules Amendments

57 Fed. Reg. 32,314 (July 21, 1992)

### Preamble to EPA's 2002 NSR Rules Amendments

67 Fed. Reg. 80,186 (Dec. 31, 2002)

### **Relevant Michigan NSR Rules**

MICH. ADMIN. CODE R. 336.2802(4)(a)(ii)

MICH. ADMIN. CODE R. 336.2802(4)(b)

MICH. ADMIN. CODE R. 336.2802(4)(c)

MICH. ADMIN. CODE R. 336.2818(3)(a)(i)-(iii)

MICH. ADMIN. CODE R. 336.2818(3)(b)

MICH. ADMIN. CODE R. 336.2818(3)(c)

MICH. ADMIN. CODE R. 336.2818(3)(d)

### **GLOSSARY OF ACRONYMS AND ABBREVIATIONS**

CAA Clean Air Act

EPA United States Environmental Protection Agency

MDEQ Michigan Department of Environmental Quality

NAAQS National Ambient Air Quality Standards

NSR New Source Review

PSD Prevention of Significant Deterioration

PTE Potential to Emit

RMRR Routine Maintenance, Repair and Replacement

SIP State Implementation Plan

### **PRELIMINARY STATEMENT**

This NSR enforcement case is the first of its kind — no court has yet addressed a challenge to recent projects governed by EPA's 2002 "NSR Reform Rules." Previous NSR enforcement cases have involved allegations that projects performed many years in the past were "major modifications" under NSR rules that EPA promulgated in 1980. The 1980 NSR rules provided no guidance as to what notice a regulated entity should provide or what records it should keep before undertaking a project that might implicate NSR, or what an entity should do to demonstrate compliance after the project was complete. As the Michigan Department of Environmental Quality ("MDEQ") has observed, determining applicability under these old rules was "[p]erhaps the most frustrating and complicated aspect" of the regulatory regime. As a result, the rules created "disincentives that discouraged sources from making the types of changes that improve operating efficiency, implement pollution prevention projects, and result in other environmentally beneficial changes." 67 Fed. Reg. 80,186, 80,192 (Dec. 31, 2002).

The 2002 NSR Reform Rules changed all that. In these new rules, EPA confirmed that NSR is triggered only when the project in question *causes* an emissions increase. More importantly here, the NSR Reform Rules (which Michigan has adopted) established two "source obligations" that prescribe a common sense procedure for complying with NSR. The first obligation applies before undertaking construction of a project. Under that procedure, before construction, an operator like Detroit Edison makes a projection of its actual emissions after a project, excludes emissions increases not caused by the project, and explains why it concluded that certain emissions increases could be excluded as unrelated to the project. The operator then

<sup>&</sup>lt;sup>1</sup> MDEQ, Air Quality Division, *PSD Workbook: A Practical Guide to Prevention of Significant Deterioration* (Oct. 2003) at 2-1, *available at* http://www.deq.state.mi.us/aps/downloads/permits/PSD%20Workbook.pdf ("MDEQ PSD Workbook").

provides notice of its projection to the regulating authority (in this case, MDEQ). At that point, the rules make clear that the operator need not wait for any additional authorization from MDEQ. Rather, the operator that uses this procedure can commence construction without an NSR permit in full compliance with the Clean Air Act ("CAA" or "Act").

The second source obligation applies post-project. Under the NSR Reform Rules, for any project for which there is a reasonable possibility that the project will cause a significant emissions increase, the operator must monitor the emissions that could increase as a result of the project and calculate and maintain a record of annual emissions for five years (or, in one circumstance not at issue here, ten years). The operator then reports those emissions to the regulating authority annually after the end of each calendar year. At this point, the proof is in the pudding. If the actual data show an increase, then *and only then* will the project be evaluated to see if a "major modification" and a possible NSR violation has occurred.

The NSR Reform Rules thus introduced a healthy dose of common sense into NSR applicability. They give operators a defined process to follow pre-construction in order to undertake a project without the threat of violating NSR, if their emissions are projected not to increase as a result of the project. And they require the operator to create a record of compliance for five years thereafter, which both the operator and the permitting authority can review to determine with certainty whether emissions have actually increased due to the project.

The material facts under the NSR Reform Rules are not in dispute. As explained below, Defendants Detroit Edison Company and DTE Energy Company (collectively, "Detroit Edison" or "the Company")<sup>2</sup> complied with the source obligation of those before starting work on the

<sup>&</sup>lt;sup>2</sup> Detroit Edison Company is a wholly owned subsidiary of the holding company, DTE Energy Company, and is the sole owner and operator of the Monroe Power Plant. Defendants (Continued . . . .)

three projects at issue here. It projected its post-construction emissions; it concluded that any projected post-construction increases in emissions were not the result of the projects; and it reported its findings to MDEQ. It thus could commence construction without obtaining an NSR permit. And Detroit Edison is now conducting the required post-project monitoring and will confirm when the time comes that none of these projects triggered NSR. If, as EPA seems to allege, Detroit Edison was wrong in its pre-project projection, the post-project emissions data that Detroit Edison is required to collect and report to MDEQ within 60 days of the end of each calendar year will show it (or, as Detroit Edison has projected, will *not* show it). At that point, if emissions have increased as a result of the projects at issue, Detroit Edison could be subject to post-construction NSR permitting and possibly an enforcement action. But as of the date that EPA filed its suit and as things stand today, Detroit Edison has neither "violated" nor "is in violation of" any requirement of the Act, as required by CAA § 113(b)(1). Accordingly, this enforcement action should be dismissed.

### STATUTORY AND REGULATORY BACKGROUND

A brief review of the statutory background and regulatory history shows how the NSR Reform Rules changed and clarified source obligations under this program.<sup>3</sup>

### I. New Source Programs under the CAA

Congress in 1970 directed EPA to develop National Ambient Air Quality Standards

deny that DTE Energy Company is an operator of Monroe Unit 2, and do not intend to waive this or any claims or defenses by defining the defendants as "Detroit Edison" here.

<sup>&</sup>lt;sup>3</sup> Detroit Edison and EPA have provided this context before in connection with EPA's motion for preliminary injunction, (Doc. No. 8), and this brief refers to the briefs filed by EPA and Detroit Edison in connection with that motion. Citations to EPA's Memorandum in Support of Plaintiff's Motion for Preliminary Injunction (Aug. 6, 2010) (which is part of Doc. No. 8) are to "EPA Mem." Citations to Defendants' Opposition to Plaintiff's Motion for Preliminary Injunction (Nov. 4, 2010) (Doc. No. 46) are to "Detroit Edison Opp."

("NAAQS") to protect the nation's public health with an adequate margin of safety. 42 U.S.C. § 7409. The States, in turn, were to develop SIPs setting source-by-source emissions limits to meet the NAAQS. *Id.* § 7410. Subsequently, a court ordered EPA to revise SIPs to prevent "significant deterioration" of air quality in areas meeting the NAAQS.

In 1977, Congress amended the CAA to codify the regulatory prevention of significant deterioration ("PSD") preconstruction permit program promulgated in 1974 and to create a Nonattainment NSR program (referred to collectively as the "NSR programs"). The NSR rules adopted in 1978 and amended in 1980 require a permit to construct a new major stationary source, or to undertake a "major modification" of an existing major stationary source. The NSR programs focus on emissions increases above "baseline" levels that add to existing pollution. *See* 42 U.S.C. §§ 7470(5), 7473, 7479(4). These increases must be *caused by* activities that are "physical change[s] in or change[s] in the method of operation" as defined under EPA's rules. *See* 40 C.F.R. § 52.21(b)(2).

As construed by the courts, the 1980 rules contemplated a preconstruction judgment of whether a "change" is "projected" to result in a "significant net increase" in emissions over baseline emissions, but imposed no pre- or post-construction reporting or recordkeeping requirements. <sup>5</sup> Moreover, the 1980 rules provided no guidance on how to project emissions. And they provided for post-construction NSR permitting in only one instance — where enforceable limitations on the emitting capacity of a source that were imposed to avoid a significant emissions increase that would trigger NSR are relaxed. In this instance, the 1980

<sup>&</sup>lt;sup>4</sup> Sierra Club v. Ruckelshaus, 344 F. Supp. 253 (D.D.C. 1972), aff'd per curiam 4 Env't Rep. Cas. (BNA) 1815 (D.C. Cir. 1972).

<sup>&</sup>lt;sup>5</sup> See, e.g., United States v. Cinergy Corp., 458 F.3d 705, 709 (7<sup>th</sup> Cir. 2006) ("[W]hat is required...is not prescience, but merely a reasonable estimate of the amount of additional emissions that the change will cause.").

rules impose a "source obligation" that "*[a]t such time*" as the enforceable limitation is relaxed, the source "becomes a . . . major modification" requiring an NSR permit. 40 C.F.R. § 52.21(r)(4) (emphasis added).

In 1992, EPA revised the 1980 rules to allow electric utilities that submit annual "post-change" emission reports to use a new emission projection technique, called "the 'representative actual annual emissions' methodology." *See* 57 Fed. Reg. 32,314, 32,325 (July 21, 1992). The rules also announced a "post-construction" PSD reporting requirement for sources opting to use this new emission projection approach. As EPA explained in the 1992 preamble in language similar to the "post-construction" NSR applicability requirement of the 1980 rules (i.e., 40 C.F.R. § 52.21(r)(4)): "If . . . the reviewing authority determines [based on post-project reporting] that the . . . emissions have in fact increased significantly over baseline . . . as a result of the change, the source would become subject to NSR requirements *at that time*." 57 Fed. Reg. at 32,325 (emphasis added).

The 1992 rules also provided guidance on the "causation" test for determining whether a "change" results in an increase. Specifically, in the preamble to the 1992 rules, EPA set forth two conditions under which a portion of a unit's post-change emissions was required to be excluded from the pre-project emission projection. The first of these is the "capable of accommodating" prong, which allows for the exclusion of emissions up to the level that the unit was capable of emitting but did not emit during the pertinent baseline period (*i.e.*, in the unit's "representative" pre-change condition). For this prong, EPA announced a "but for" causation standard. 57 Fed. Reg. at 32,326. The second condition is the "unrelated to the change" prong. Here, EPA explained that the causation test was whether the "change" was the "predominant cause" of the increase. *Id.* at 32,327.

In 2002, EPA amended *both* the 1980 rules *and* the 1992 rules to establish a new, more detailed "projected emissions" applicability test based on the 1992 rule for electric utilities that would apply to *all* categories of sources. The 2002 rules also affirmed the "causation" requirements in the 1992 rules, <sup>6</sup> established new requirements governing post-change emissions reporting, and included a "post-construction" NSR monitoring requirement like the 1992 rules.

The 2002 rules recognize that what a source owner might project to emit in the future is *always* the product of variable factors that, if managed consistent with the projection, will result in future emissions that conform to the projection. Accordingly, even if before a project one cannot exclude all "reasonable possibility" of an emissions increase because factors affecting a projection might change in the future, EPA created a new "source obligation," *see* 40 C.F.R. § 52.21(r)(6), that would allow construction to commence in compliance with the Act. Specifically, "before beginning actual construction," a company may choose to "make and record a projection of post-change emissions" that the project will not cause an emissions increase. 67 Fed. Reg. at 80,192. That projection must predict the "maximum annual rate" of emissions during the five years after the project, and must "exclude any emissions that the unit could have accommodated before the change and that are unrelated to the project." *Id.* Having made such a projection, the company must then provide notice (or keep records) of the projection before construction and submit "post-construction" emission reports. *Id.* 

Because a source that performs this projection will be required to submit post-

<sup>&</sup>lt;sup>6</sup> See, e.g., 67 Fed. Reg. at 80,203 (explaining that the 2002 NSR Reform Rules include "the causation provision as originally contained in the [1992] amendments."); *id.* at 80,198 ("[W]e have decided to leave the [1992] rules intact in most respects.").

construction data on annual emissions,<sup>7</sup> it is "not . . . required to obtain any kind of determination from the reviewing authority *before proceeding with construction*." *Id.* at 80,192 (emphasis added). And a company's projection of future emissions need not be based on enforceable limitations on capacity to emit a pollutant, like those referenced in 40 C.F.R. § 52.21(r)(4) of the 1980 rule. *Id.* at 80,197.

Critically, once the projection is filed with the permitting authority, construction may begin. But to ensure that emissions will not in fact increase as a result of a "change," the 2002 rules impose a second source obligation and provide that "if you use this procedure, you are required to track post-change annual emissions," and then report whether "post-change annual emissions exceed the baseline actual emissions by a significant amount." *Id.* at 80,192.

This new procedure relieves the regulated community of the frustrating uncertainties caused by the previous rules and makes real data, not highly variable factors underlying any emission projection, the measure of compliance. As EPA explained in response to comments on the 2002 rules:

We believe that most sources should be able to adequately project the emissions increases that will result from the physical and operational changes that they choose to make. If for some reason the projection is not accurate, the required tracking of emissions ... following the changes will determine whether a significant emissions increase *has actually occurred*. Where the change is found to be a major modification, despite the projections made by the source, the reviewing authority will be expected to proceed with the process of subjecting the source to the major NSR requirements.

<sup>&</sup>lt;sup>7</sup> As EPA has explained, it does "not believe that every modification," including even those that involve "added capacity" or an "increase in the PTE [potential to emit]," is "intended for full use of that new capacity or PTE," in that "[s]uch actions could well be intended to enhance current operations without resulting in increased production or operation." *Id.* at 80,203.

U.S. EPA, *Technical Support Document for the Prevention of Significant Deterioration and Nonattainment Area New Source Review Regulations* (Nov. 2002) at I-5-28, *available at* http://www.epa.gov/NSR/actions.html#2002 (emphasis added). If despite the pre-project projection, actual post-project data shows a significant increase that "results" from the change, then a post-construction NSR permit is required at that time, and the source owner might also be subject to an enforcement action.<sup>8</sup>

### II. The Michigan NSR Rules

Michigan has adopted these NSR Reform Rules into its SIP for PSD. MICH. ADMIN. CODE R. 336.2801, *et seq.* <sup>9</sup> A "major modification" under the Michigan NSR program is defined as (i) a "[p]hysical change in or change in the method of operation of a major stationary source" that (ii) "result[s] in" (*i.e.*, causes) (iii) a "significant emissions increase." MICH. ADMIN. CODE R. 336.2801(aa)(i). In the provision governing "[a]pplicability" of the program to "project[s] at an existing major stationary source," the Michigan NSR rules state that "[t]his part applies to … major modifications … in the following manner":

A project *is* a major modification for a regulated new source review pollutant if it *causes* both of the following types of emissions increases:

- (i) A significant emissions increase.
- (ii) A significant net emissions increase.

<sup>&</sup>lt;sup>8</sup> The 2002 NSR Reform Rules were upheld by the D.C. Circuit in *New York v. U.S. EPA*, 413 F.3d 3 (D.C. Cir. 2005).

<sup>&</sup>lt;sup>9</sup> Because Michigan's SIP for "nonattainment" NSR has not yet been approved by EPA, the NSR Reform Rules for nonattainment areas in the state apply through Appendix S to 40 C.F.R. pt. 51 (2008). Because the PSD rules, which have been approved, are identical in all relevant respects to the nonattainment NSR rules, they will hereafter be referred to collectively as the "Michigan NSR rules."

See id. at R. 336.2802(4)(a) (emphasis added). <sup>10</sup> By contrast, "a project is **not** a major modification *if it does not cause a significant emissions increase*." *Id.* (emphases added). <sup>11</sup>

### A. Pre-project emission projections

Because NSR establishes a preconstruction permitting program, the Michigan NSR rules contain provisions that the owner/operator of an existing source is to use prior to undertaking a proposed activity. Those provisions require owners to project whether an activity that might be a "project" will cause an emissions increase. Under these rules, the "procedure for calculating whether a significant emissions increase *will occur* depends upon the type of emissions units being modified." *See* MICH. ADMIN. CODE R. 336.2802(4)(b) (emphasis added). <sup>12</sup> For "projects that only involve existing emissions units,"

[a] significant emissions increase of a regulated new source review pollutant is *projected to occur* if the sum of the difference between the *projected actual emissions* and the baseline actual emissions for each existing emissions unit, equals or exceeds the significant amount for that pollutant.

<sup>&</sup>lt;sup>10</sup> A "net emissions increase" calculation takes into account both the "increase in emissions from a particular change or change in the method of operation" at the major stationary source and "[a]ny other increases and decreases in actual emissions" at the source that are "contemporaneous with the particular" and which are "otherwise creditable." See MICH. ADMIN. CODE R. 336.2801(ee)(i).

The term "project" under MICH. ADMIN. CODE R. 336.2801(kk) is a regulatory term-of-art defined to mean a "physical change in, or change in the method of operation of, an existing major stationary source." The Michigan NSR rules provide that a "[p]hysical change or change in the method of operation *shall not include* . . . [r]outine maintenance, repair, and replacement." *See* MICH. ADMIN. CODE R. 336.2801(aa)(iii)(A) (emphasis added). As Detroit Edison has previously explained (*see* Detroit Edison Opp. at 10-16), the Monroe repairs were "routine maintenance, repair, and replacement." For purposes of this motion only, however, Detroit Edison assumes that the Monroe work performed at Monroe Unit 2 constituted "projects" within the meaning of the Michigan Administrative Code.

<sup>&</sup>lt;sup>12</sup> This language from the Michigan SIP parallels that of "applicability" provisions of the federal NSR rules set forth at 40 C.F.R. § 52.21(a)(2)(iv)(b) ("The procedure for calculating (*before beginning actual construction*) whether a significant emissions increase . . . will occur depends upon the type of emissions units being modified" (emphasis added)).

MICH. ADMIN. CODE R. 336.2802(4)(c) (emphases added).

"Projected actual emissions" is, in turn, defined as the "maximum annual rate, in tons per year, at which an existing emissions unit *is projected to emit*" a regulated PSD pollutant "in any 1 of the 5 years (12-month period) following the date the unit resumes regular operation after the project." *See* MICH. ADMIN. CODE R. at 336.2801(ll)(i) (emphasis added). In determining these projected actual emissions "*before beginning actual construction*, the owner or operator . . . shall . . . [c]onsider all relevant information," including but not limited to the "company's own representations," the "company's expected business activity," and the "company's filings with the state or federal regulatory authorities." MICH. ADMIN. CODE R. 336.2801(ll)(ii)(A) (emphasis added).

Reflecting the causation requirement of the statute and regulations, <sup>13</sup> the "projected actual emissions" rule requires that the owner/operator "*shall . . . [e]xclude*, in calculating any increase in emissions that results from the particular project," that "portion of the unit's emissions following the project" that the unit "could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project," including "any increased utilization due to product demand growth." MICH. ADMIN. CODE R. 336.2801(ll)(ii)(C) (emphasis added).

Where the "projected actual" emissions test is used *and* there is a "reasonable possibility" that an emissions increase could be projected after the project, <sup>14</sup> the Michigan NSR rules require

<sup>&</sup>lt;sup>13</sup> See 67 Fed. Reg. at 80,203 ("Both the statute and the implementing regulations indicate that there should be a causal link between the proposed change and any post-change increase in emissions.").

<sup>&</sup>lt;sup>14</sup> Under the Michigan NSR rules, a "reasonable possibility" occurs when the source calculates either (i) "[a] projected actual emissions increase of at least 50% of the amount that is (Continued . . . .)

that "[b]efore beginning actual construction of the project, the owner or operator shall document and maintain a record" that contains the "projected actual emissions, the amount of emissions excluded under R 336.2801(ll)(ii)(C) and an explanation for why such amount was excluded," as well as a "description of the project" and an "[i]dentification of the emissions unit or units whose emissions of a regulated new major source review pollutant may be affected by the project." *See* MICH. ADMIN. CODE R. 336.2818(3)(a)(i)-(iii). "[B]efore beginning actual construction, the owner or operator shall provide a copy" of the foregoing information to MDEQ. *Id.* at R. 336.2818(3)(b). The rules make clear, however, that the owner or operator submitting such information is "*not require[d]*... to obtain any determination from [MDEQ] before beginning actual construction." *Id.* (emphasis added). So once the pre-project notification is submitted, construction may lawfully begin.

Reflecting EPA's rules, the Michigan NSR rules confirm that they "do[] not require ... any determination from the department [regarding the project notification] before beginning actual construction," because, under the NSR Reform Rules, *actual* annual emissions after the project are the test of the projection's accuracy. *Id*.

### B. Post-project Monitoring and Reporting

The Michigan NSR rules state unequivocally that a "project is *not* a major modification if it *does not cause* a significant emissions increase." MICH. ADMIN. CODE R. 336.2802(4)(a)(ii)

a significant emissions increase, as defined in R 336.2801(rr)," or (ii) "[a] projected actual emissions increase" would occur if one included "the amount of emissions excluded under R 336.2801(ll)(ii)(C)" (i.e., if one included emissions increases that are projected *not* to be caused by the project). MICH. ADMIN. CODE R. 336.2818(3)(f). In this case, because there is a "reasonable possibility" of an increase if one includes "the amount of emissions excluded under R 336.2801(ll)(ii)(C)" that are projected *not* to be caused by the project, the Company filed a pre-project notification presenting the information required by the Michigan Code. Ex. 1, Declaration of Skiles W. Boyd ("Boyd Decl.") ¶¶ 15, 17 & Ex. 2.

(emphasis added). To enable permitting authorities to determine whether a project for which a pre-project notification has been filed in fact has caused a "significant emissions increase," the NSR rules contain post-project actual annual emissions monitoring and reporting requirements.

The rules state that, "[f]ollowing resumption of regular operations" after the project, the owner or operator must "monitor the emissions . . . that could increase as a result of the project," and "calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years." *See* MICH. ADMIN. CODE R. 336.2818(3)(c). In the specific case of an "existing electric utility steam generating unit," the owner/operator "shall submit a report" to the MDEQ "within 60 days after the end of each year . . . setting out the unit's annual emissions" for that year. MICH. ADMIN. CODE R. 336.2818(3)(d). The permitting authority then uses this post-project data to determine whether a project has actually caused — or has not caused — a significant actual annual emissions increase. *See* MICH. ADMIN. CODE. R. 336.2802(4)(a)(ii) ("The project *is not* a major modification *if it does not cause a significant emissions increase.*" (emphasis added)).

Critically, it is this post-project data — not the pre-project projection — that determines whether NSR has been triggered. As the Michigan NSR rules explain, "*[r]egardless of preconstruction projections*," a "major modification" depends on whether "the project causes a significant emissions increase and a significant net emissions increase." MICH. ADMIN. CODE R. 336.2802(4)(b) (emphasis added). In other words, under the Michigan NSR rules, actual emissions after a project always trump pre-construction projected emissions in determining whether a project for which no emissions increase due to the project is projected is nonetheless a

<sup>&</sup>lt;sup>15</sup> If the project increases the unit's design capacity or "potential to emit," the reporting period is 10 years. 67 Fed. Reg. at 80,203.

"major modification." Post-project monitoring and reporting gives MDEQ the data necessary to make this call. As EPA explained in 1992, it "provide[s] a reasonable means of determining whether a significant increase . . . resulting from a proposed change . . . occurs within 5 years [or 10 years] following the change." 57 Fed. Reg. at 32,325. So if, despite the pre-project notice of no increase due to the project, the reviewing authority "determines that the source's emissions have *in fact* increased significantly over baseline levels as a result of the change, the source would become subject to NSR requirements *at that time*." *Id*. (emphases added). <sup>16</sup>

Thus, under the Michigan SIP, where the pre-construction notice projects no significant increase caused by the project, the NSR permit requirement can only be triggered by a post-construction significant increase in actual annual emissions (not a new, retrospective "projection") that is demonstrated to be caused by the project. Furthermore, even in the event of a reported post-project annual increase, MDEQ has made clear that such an increase "do[es] not automatically constitute a violation of PSD." MDEQ PSD Workbook at 4-6. At that time, "[t]he submittal of this report will only trigger an evaluation of the circumstances to determine *if* a PSD violation may have occurred." *Id.* at 4-7 (emphasis added).

### STATEMENT OF UNDISPUTED MATERIAL FACTS

Like every other electric utility in the country, Detroit Edison regularly performs maintenance, repair and replacement activities to ensure that its units run efficiently and safely, without interruption and without injury to its workforce. Like every other utility in the country,

<sup>&</sup>lt;sup>16</sup> Further confirmation of this feature of the new rules is EPA's explanation that it is unnecessary to treat pre-project projections as enforceable emissions limits. "The Act provides ample authority to enforce the major NSR requirements *if* your . . . change results in a significant net emissions increase." 67 Fed. Reg. at 80,204 (emphasis added). Thus, if post-project annual emissions "differ[] from your projection of post-change emissions . . . then you must report this increase." *Id.* at 80,197. This, EPA has said, "[e]nsures [t]hat . . . [a] project is not a major modification." *Id.* 

Detroit Edison periodically removes its units from service for up to three months to perform this maintenance work. Boyd Decl. ¶ 12. Before starting such work, Detroit Edison discusses the work with MDEQ and submits to MDEQ a planned outage notification. Boyd Decl. ¶ 15.

With respect to the economizer, pendant reheater and waterwall projects performed at Monroe Unit 2 starting in March 2010, Detroit Edison submitted to MDEQ an outage notification on March 12, 2010, before commencing work on the projects. Boyd Decl. ¶ 17. That notice (i) addressed each of the information requirements of the Michigan NSR rules, *see* MICH. ADMIN. CODE R. 336.2818(3)(a); (ii) explained why the repairs were projects within the NSR "routine maintenance, repair, and replacement" exclusion; and (iii) explained why, in any event, the projects would not result in any "significant emissions increase." *Id.*; Boyd Decl. Ex. 2 ("Notification Letter"). MDEQ did not question Detroit Edison's notification, either then or since that time. Boyd Decl. ¶ 17. The projects started on March 13, 2010, and concluded on June 20, 2010. *Id.* ¶ 18. Monroe Unit 2 resumed regular operations later that summer.

Less than one year has passed since Monroe Unit 2 resumed operations following the project, so Detroit Edison has not yet submitted a post-construction report on actual emissions as required by MICH. ADMIN. CODE R. 336.2818(3)(d). But Monroe Unit 2 has not exceeded preproject emissions on an annualized basis since it resumed operations. Ex. 2, Declaration of Gordon P. Usitalo at ¶ 3.

<sup>&</sup>lt;sup>17</sup> Detroit Edison's submittal was made in compliance with the provisions of MICH. ADMIN. CODE R. 336.2818(3)(b), described *supra*, which require only that the formal notification be made "before beginning actual construction." As Detroit Edison regularly communicates with MDEQ, however, the agency was aware of the Monroe Unit 2 Project well before the Company submitted the Notification Letter. Boyd Decl. at ¶¶ 15, 17.

### **ARGUMENT**

The Michigan NSR rules establish a "source obligation" (i) to provide a pre-project projection that the project will *not cause* post-project emissions to increase above baseline levels based on "all relevant information" including "the company's own representations;" and (ii) to conduct post-project monitoring and reporting to confirm the validity of the pre-project projection. MICH. ADMIN. CODE. R. 336.2818(3), R. 336.2801(II)(ii)(A). According to these rules, "[t]he project is *not a major modification if it does not cause* a significant emissions increase." MICH. ADMIN. CODE R. 336.2802(4)(a) (emphases added).

Detroit Edison submitted the Notification Letter before starting work on the tube projects performed during the 2010 outage. The first annual report to MDEQ required by the rules will not be submitted until early 2012, but based on monitoring performed to date and consistent with this Court's Order of August 30, 2010 (Doc. No. 29), emissions have not increased above baseline levels. Because a "significant emissions increase" has not occurred, much less an increase caused by the projects, the projects are not "major modifications."

# I. Detroit Edison Complied With the Requirements of the Michigan NSR Rules Before Starting the Projects.

As explained above, the Michigan NSR rules require operators like Detroit Edison to file a pre-project notification that explains whether the project is expected to cause an emissions increase. That notification must include "the projected actual emissions, the amount of emissions excluded ... and an explanation for why such amount was excluded." MICH. ADMIN. CODE R. 336.2818(3)(a)(iii). In determining whether the project is projected to cause an actual emissions increase, the operator must consider "all relevant information, including ... historical operational data, the company's own representations ... [and] the company's [regulatory] filings." MICH. ADMIN. CODE R. 336.2801(ll)(ii)(A) (emphasis added). The "source obligation"

is to "provide a copy of the information required by subdivision (a)" to MDEQ "before beginning actual construction." *Id.* The Michigan NSR rules "do[] not require the owner or operator of the unit to obtain any determination from the department before beginning actual construction." MICH. ADMIN. CODE R. 336.2818(3)(b).

Before starting work on the 2010 outage projects, Detroit Edison consulted with MDEQ and filed a notification that provided the information required by MICH. ADMIN. CODE R. 336.2818(3)(a) of the Michigan PSD rules. *See* Boyd Decl. ¶¶ 15, 17. This project notification (i) described the projects; (ii) identified the affected emissions unit; and (iii) described "the applicability test used to determine that the project is not a major modification." MICH. ADMIN. CODE R. 336.2818(3)(a); *see* Boyd Decl. ¶ 17, Ex. 2. The notice also addressed baseline actual emissions, projected actual emissions, excluded emissions, and the reasons for excluding those emissions. In particular, the notice explained that:

"Projected actual emissions," as defined in MAR 1801(II), are also shown in Table 1, along with a comparison of projected and baseline actual emissions. This comparison shows that the projects will not result in an emissions increase . . . . As required under the new rules we then excluded from the PROMOD projections "...that portion of the unit's emissions following the project that an existing unit could have accommodated ... and that are also unrelated to the particular project," including increases due to demand and market conditions or fuel quality per MAR 1801(II)(ii)(C). (See Table 1) . . . .

[E]missions and operations fluctuate year-to-year due to market conditions and in any individual year could very well exceed baseline levels. Obviously, since the baseline represents a 2-year average, one of those years was above the baseline and one below. At some point in the future, baseline levels may be exceeded again, but not as a result of this outage. Future unit utilization is also a function of expected electricity market conditions. Many factors influence market demand – weather, availability of other units, transmission limitations, electric system security, etc. Moreover, fuel quality could change. As mentioned above, the Michigan air rules direct one to exclude from projected actual emissions ". . .

that portion of the unit's emissions following the project that an existing unit could have accommodated . . . and that are also unrelated to the particular project," including increases due to demand growth or fuel quality changes per MAR 1801(ll)(ii)(C).

Boyd Decl. Ex. 2 at 2.

In other words, Detroit Edison "projected" that the projects would not cause emissions to increase and thus were not "major modifications." Because it complied with the pre-project source notification obligation of the Michigan NSR rules, Detroit Edison could begin actual construction of the projects in full compliance with the Act. Detroit Edison can be subject to NSR permitting and possible enforcement in the future as to the 2010 projects *only if* actual annual emissions increase and *only if* the actual increase was "caused" by the projects. Because it has met the pre-project source obligation, the Company has neither "violated" nor "is in violation of" the applicable NSR rules, as required by § 113(b)(1). *See* 42 U.S.C. § 7413(b)(1).

### II. EPA's Claims Are Based on Inappropriate Challenges to Detroit Edison's Pre-Project Projections, Not Actual Post-Project Data as Required by Michigan's Rules.

Monroe Unit 2 resumed regular operations following the projects in late summer 2010. The first calendar year for which the unit's annual emissions following the Projects can be calculated therefore is calendar year 2011. In accordance with MDEQ's rules, Detroit Edison will file its report describing emissions "in tons per year on a calendar year basis" within 60 days after the end of calendar year 2011. MICH. ADMIN. CODE R. 336.2818(3)(c), (d). That report will be the first opportunity for EPA or MDEQ to measure whether the projects caused a significant net emissions increase and thus constituted "major modifications." If that report confirms Detroit Edison's projection, it will verify that "[t]he project is not a major modification ... [because] it does not cause a significant emissions increase." MICH. ADMIN. CODE R. 336.2802(4)(a)(ii). If that report does *not* confirm the Company's projection of no significant

increase caused by the projects, the projects will become subject to NSR — and possibly subject to a *future* and *new* enforcement action — *at that time*. See 57 Fed. Reg. at 32,325.

Until that time, however, the projects are not "major modifications" under the plain language of the Michigan NSR rules, and Detroit Edison is in full compliance with the Act. As a result, this action under section 113(b) of the Act cannot be maintained, because section 113(b) only authorizes enforcement only where an owner "has violated" or "is in violation" of a CAA requirement. 42 U.S.C. § 7413(b).

Rather than wait to see what actual emissions data show, as required by the Michigan NSR rules, EPA bases its Complaint on a hypothetical, post-project calculation. According to EPA, if Detroit Edison had used the projection methodology of EPA's experts — a methodology that is not provided in EPA's rules — Detroit Edison would have projected that the Projects would have caused emissions to increase.<sup>18</sup> EPA maintains that this retrospective "projection"

(Continued . . . .)

<sup>&</sup>lt;sup>18</sup> See EPA Mem. at 21-26. EPA's post-construction projections are irrelevant. But it is worth noting that the methodology offered by EPA's experts is inconsistent with Michigan's NSR rules. Specifically, EPA's experts' methodology is not based on "all relevant information" as required by the Michigan SIP. MICH. ADMIN. CODE R. 336.2801(II)(ii). Instead, these projections rely exclusively on the presumption that each hour of "availability" that the projects have "recovered" at Monroe Unit 2 would result in an hour of operation (and, thus, an hour's worth of emissions) following the Projects. See, e.g., EPA Mem. at 23-24 (arguing that "decreasing outage time leads to increased availability and increased availability leads to increased generation and pollution," and that the "additional, available hours recovered" by the Project "are clearly related to the project.").

But in promulgating the 2002 NSR rules, EPA did not establish a single permissible methodology for projecting future emissions. To the contrary, EPA did not even mention the methodology its experts use here and instead gave companies the authority to base projections on "all relevant factors," many of which can be controlled by the company after operations resume. See, e.g., 40 C.F.R. § 52.21(b)(41)(ii) (requiring consideration of "all relevant information, including but not limited to ... the company's own representations ... [and] expected business activity"). And having made a projection based on "all relevant information," EPA made clear that "[y]ou will not be required to obtain *any* kind of determination from the reviewing authority before proceeding with construction." 67 Fed. Reg. at 80,192 (emphasis added).

must control *regardless* of the company's own projection and *regardless* of the post-construction monitoring and reporting requirements of the Michigan NSR rules.

But that is not what the CAA or the Michigan NSR rules say. Under the Michigan NSR rules, actual post-project data provide the litmus test for pre-project projections and ultimately, the measure of whether a major modification has occurred. A "modification" is a "physical change in, or change in the method of operation of, a stationary source *which increases* the amount of any air pollutant *emitted* by such source or *which results in* the emission of any air pollutant not previously emitted." 42 U.S.C. § 7411(a)(4) (emphasis added). Under the plain terms of this definition, a "modification" therefore can occur only when emissions increase *in fact. See Envtl. Def. v. Duke Energy Corp.*, 549 U.S. 561, 569 (2007) ("The Act defines modification . . . as a physical change . . . that increases the amount of a pollutant discharged."); *see also* 57 Fed. Reg. at 32,325 ("NSR applies *only* where the emissions increase is *caused* by the change.") (emphases added). A "project is *not* a major modification if it *does not cause* a significant emissions increase." MICH. ADMIN. CODE R. 336.2802(4)(a)(ii) (emphases added).

The "projected actual" emissions test performed pre-project serves a different purpose.

That test is used to determine whether a "significant emissions increase . . . is *projected to*\*\*occur," not whether a "significant increase" and "major modification" in fact \*has occurred. See

Moreover, EPA has made clear that it is *never* appropriate simply to *presume* (as does EPA's litigation-based projection methodology) that there will be an increase in emissions whenever a reliability improvement is undertaken. As EPA has explained, it "in no way intends to discourage . . . changes that increase efficiency or reliability or lower operating costs, or improve other operational characteristics of the unit," 57 Fed. Reg. at 32,327, and has specifically said that it "*declines to create a presumption* that every emissions increase that follows a change" is "inextricably linked to the . . . change." *Id.* (emphasis added).

MICH. ADMIN. CODE R. 336.2802(4)(c) (emphases added).<sup>19</sup> As Michigan's rules make clear, actual data will dictate whether a major modification has occurred "regardless of preconstruction projections." MICH. ADMIN. CODE R. 336.2802(4)(b). At most, EPA's methodology might be used to support a claim that there was a "reasonable possibility" of an emissions increase, triggering notification and reporting under the Michigan NSR rules. But no such claim exists here because Detroit Edison has complied with the recordkeeping and reporting requirements, and there is no claim by EPA that Detroit Edison has violated the recordkeeping and reporting requirements of the Michigan SIP.

In other words, this Court need not officiate a "battle of experts" to conclude that Detroit Edison has not violated the Act. Detroit Edison complied with the 2002 NSR Reform Rules, as incorporated into the Michigan rules, by submitting its notification showing that the projects would not cause an emissions increase. The accuracy of that projection will be measured based on required emissions monitoring and annual reporting. No CAA § 113(b)(1) enforcement action against Detroit Edison may be maintained at this time.

### **CONCLUSION**

For these reasons, Detroit Edison's motion for summary judgment should be granted.

Respectfully submitted, this 9th day of June, 2011.

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<sup>&</sup>lt;sup>19</sup> See also 40 C.F.R. § 52.21(a)(2)(iv)(b) (stating that the "projected actual" test for projects at existing units serves as the "procedure for calculating (**before beginning actual construction**) whether a significant emissions increase . . . **will occur**." (emphases added)).

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### **CERTIFICATE OF SERVICE**

I hereby certify that on June 9, 2011, the foregoing **DEFENDANTS' BRIEF IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT BASED ON THE 2002 NSR REFORM RULES** was served electronically only on the following attorneys of record in accordance with an agreement reached among the parties:

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/s/ F. William Brownell

# UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF MICHIGAN

UNITED STATES OF AMERICA,

Plaintiff,

and

NATURAL RESOURCES DEFENSE COUNCIL, INC. AND SIERRA CLUB,

Intervenor-Plaintiffs,

V.

DTE ENERGY COMPANY AND DETROIT EDISON COMPANY,

Defendants.

Civil Action No. 2:10-cv-13101-BAF-RSW

Judge Bernard A. Friedman

Magistrate Judge R. Steven Whalen

### DEFENDANTS' BRIEF IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT BASED ON THE 2002 NSR REFORM RULES

# APPENDIX A: INDEX OF EXHIBITS

- Ex. 1 Declaration of Skiles W. Boyd
- Ex. 2 Declaration of Gordon P. Usitalo

# EXHIBIT 1 TO DEFENDANTS' BRIEF IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT BASED ON THE 2002 NSR REFORM RULES

### UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF MICHIGAN

UNITED STATES OF AMERICA,

Plaintiff,

And

NATURAL RESOURCES DEFENSE COUNCIL, INC. AND SIERRA CLUB,

Proposed Intervenor-Plaintiffs,

v.

DTE ENERGY COMPANY AND DETROIT EDISON COMPANY,

Defendants.

Civil Action No. 2:10-cv-13101-BAF-RSW

Judge Bernard A. Friedman

Magistrate Judge R. Steven Whalen

### **DECLARATION OF SKILES W. BOYD**

I, Skiles W. Boyd, declare as follows:

### A. Background and Experience

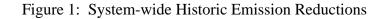
1. Since 1978, I have been employed by Detroit Edison Company ("Detroit Edison" or "the Company"), a wholly owned subsidiary of DTE Energy Company. Detroit Edison is an energy company headquartered in Detroit, and has provided electricity to customers throughout Michigan since the early 1900s. Over the past several years, I have been generally responsible for managing the Environmental Management and Resources Organization for Detroit Edison's enterprise, including all of the environmental issues related to Monroe Unit 2, a coal-fired generating unit located at Detroit Edison's Monroe Power Plant in Monroe, Michigan. My current position is Vice President of Environmental Management and Resources.

- 2. In that capacity, I am a member of a management team that is responsible for ensuring a reliable and affordable supply of electricity to more than 2 million homes and businesses throughout southeastern Michigan, while meeting all environmental regulations. Detroit Edison serves this customer demand with a diverse mix of generating sources in Michigan totaling over 11,000 megawatts ("MWs") of capacity, including seven coal-fired stations, two natural gas-fired stations, one nuclear station, and one hydroelectric station. *See* Declaration Exhibit ("Decl. Ex.") 1 at 1-5 for more information on Detroit Edison's overall operations. Detroit Edison has a long history of investing in environmental controls in order to enhance its environmental stewardship, starting with the installation of electrostatic precipitators to remove particulate emissions at the Trenton Channel Power Plant in the mid-1920s. *See* Decl. Ex. 1 at 11.
- 3. My specific duties include managing the company's environmental issues such as setting environmental policy, representing the company on environmental issues with the public and in environmental regulatory and legislative development, coordinating environmental studies and conducting environmental audits. I manage a department of approximately 72 people who are subject matter experts in the numerous areas of environmental regulatory compliance. I am active on the Research Advisory and Environmental Councils of the Electric Power Research Institute, the Air and Waste Management Association, the Business Environmental Leadership Council of the Pew Center on Global Climate Change, and the environmental committees of the Edison Electric Institute, and the American Coalition for Clean Coal Electricity. I am also on the board of the Council of Great Lakes Industries, and the Southeast Michigan Sustainable Business Forum. I have spent my entire career in the environmental field since starting at Detroit Edison in 1978.

#### **B.** The Monroe Power Plant and its State-of-the-Art Environmental Controls

- 4. Detroit Edison is the sole owner and operator of the Monroe plant. The plant is located near Detroit, Michigan, where it has operated safely for nearly 40 years. It consists of four large coal-fired electric generating units (Units 1-4) placed in service in the early 1970s. Each year the plant produces approximately 35% of Detroit Edison's total electrical power and 44% of its total fossil fuel-fired power. The Monroe plant is one of the largest employers and taxpayers in Monroe County, Michigan, employing approximately 400 permanent employees and 100 long-term contract employees. Monroe County, however, remains one of the hardest hit areas in the United States during the recent economic recession, with unemployment rates recently reaching 16%. *See* Decl. Ex. 1 at 6-9, 19 for more information on operations at the Monroe Power Plant and its economic impacts on the State.
  - 5. As a regulated public utility under the jurisdiction of the Michigan Public Service Commission ("MPSC"), Detroit Edison has a number of obligations. Among these obligations is the duty to maintain an adequate supply of generating capacity so that electricity is available upon demand at reasonable cost. A critical and necessary component of meeting that demand is the safe, reliable and continued operation of Monroe Unit 2. The Monroe Power Plant has a capacity of 3,135 MWs and generates about 16-20 million MWhrs (net) per year. Monroe Unit 2 is a 795 MW unit that alone is responsible for serving over one hundred thousand residential customers and businesses in southeast Michigan. Given the significant economic constraints facing our region, Detroit Edison is particularly cognizant of any impacts from rate increases on its customers.

- 6. While providing this safe and reliable electricity at a reasonable cost, Detroit Edison also has substantially decreased its emissions, including of sulfur dioxide ("SO<sub>2</sub>"), oxides of nitrogen ("NO<sub>x</sub>"), and particulate matter ("PM") over the years, and is currently decreasing them at an accelerated pace. Figure 1 below shows the reductions in SO<sub>2</sub>, NO<sub>x</sub> and PM systemwide at Detroit Edison over the last 35 years, which shows that emissions are in fact at historical lows.
- 7. At the Monroe plant in particular, from the installation of the first low-NO<sub>x</sub> burners ("LNB") retrofits in the mid-1990s through 2009, Detroit Edison has reduced annual NO<sub>x</sub> emissions by 79%. SO<sub>2</sub> emissions have been reduced by 69% since a fuel blending project to facilitate increased consumption of low sulfur western coal was completed in 1982 and through the recent operation of Flue Gas Desulfurization ("FGD") systems at Unit 3 and Unit 4. Figure 2 is a chart of annual SO<sub>2</sub> and NO<sub>x</sub> emissions from the Monroe plant from 1974-2009.



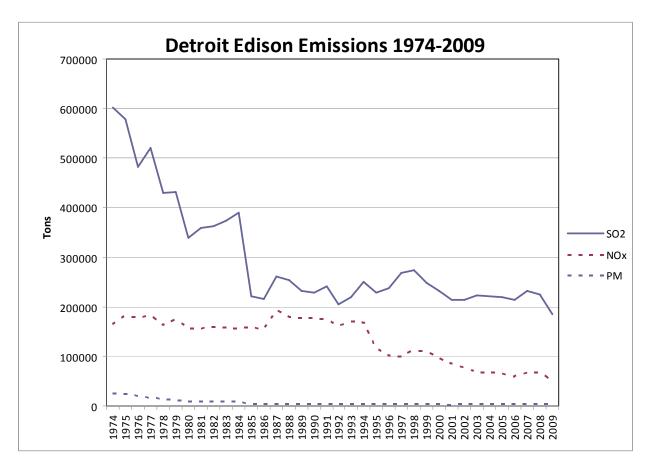
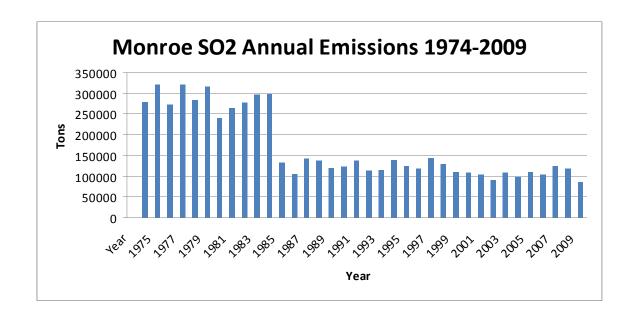
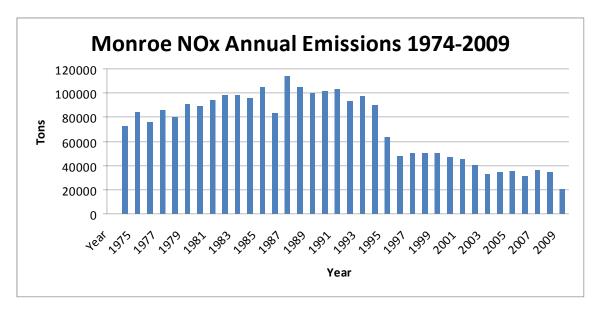


Figure 2 - Annual SO<sub>2</sub> and NO<sub>x</sub> Emissions from Monroe 1974-2009





8. More recently, Detroit Edison has embarked on a \$2 billion program to install advanced SO<sub>2</sub> and NO<sub>x</sub> controls at Monroe. In 2005-2006, Detroit Edison installed more advanced second generation LNBs on Monroe Units 1-4 (the first generation LNBs were installed in the mid-1990s). Following several years of construction, Detroit Edison started operating Selective Catalytic Reduction ("SCR") systems to reduce further NO<sub>x</sub> emissions. Operation of SCRs began on Monroe Units 1 and 4 in 2003 and on Unit 3 in 2007. FGD systems to reduce further SO<sub>2</sub> emissions began to operate at Monroe Units 3 and 4 in 2009. Construction work has already started on FGDs for Monroe Units 1 and 2, with planned final systems tie-in and commercial operation in 2014 for Unit 2. Detroit Edison also plans to start construction on the Unit 2 SCR in 2011, with completion and start-up in 2014. Given site constraints and other controls being constructed at the Monroe Plant, it is not feasible to expedite the installation of the FGD and SCR control systems planned for installation at Monroe Unit 2. See Decl. Ex. 1 at 7, 9-10, 12-18 for more information on these controls, their location and operation.

9. When the Monroe Power Plant's emissions control plan is complete, all four Monroe units will be operating with LNBs, SCRs, and FGDs, creating one of the cleanest and most efficient coal-fired power plants in the country. Indeed, due to these recently installed advanced controls, emissions for the Monroe Plant as a whole will be substantially less in 2010 than they ever were in the past, and will be substantially reduced even further with the completion of the latest projects through 2014. Figure 3 below is a schematic of the past and currently planned FGD and SCR projects at Monroe to control emissions. Figure 4 is a diagram of the Monroe Power Plant gas path, showing how SCRs and FGD systems fit within the process.

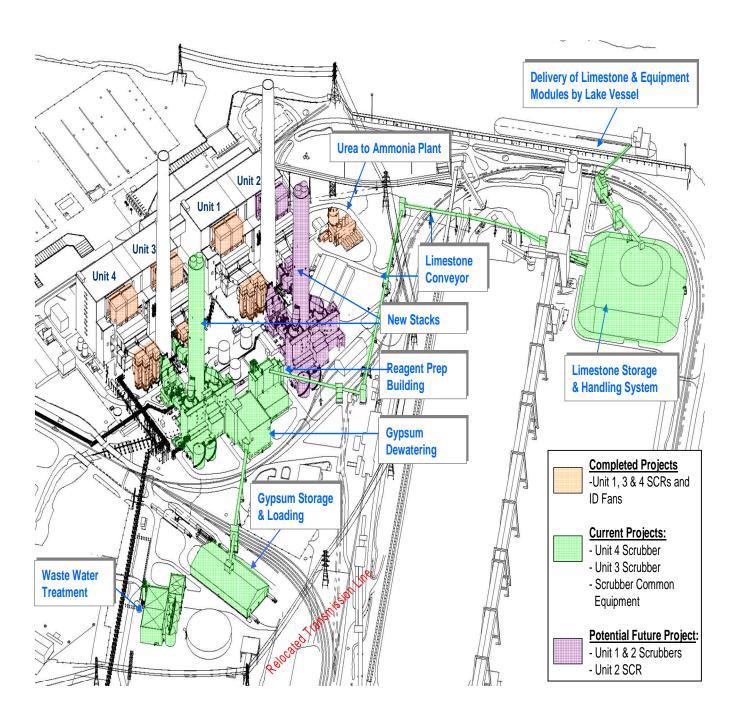


Figure 3: Schematic of Monroe Environmental Projects

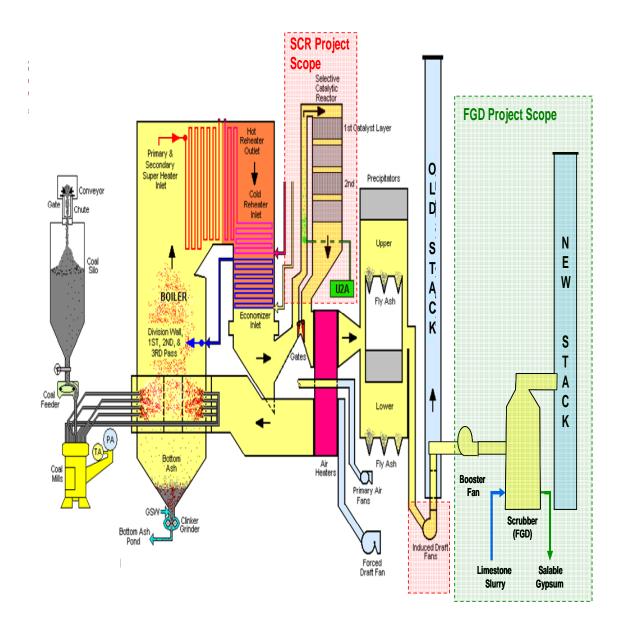


Figure 4: Diagram of Monroe Power Plant - Gas Path

10. Detroit Edison has a long history of air permitting, having first secured an air permit to allow construction of the Monroe Power Plant in 1968. Over the years, Detroit Edison has permitted all its LNB projects, its SCR systems and a variety of other small construction projects. In cases where questions have arisen over the applicability of Michigan or Federal air permit requirements, the Company has asked the regulatory agencies for guidance. For example,

when the plant was afforded the opportunity to replace its existing turbines with newer, more efficient "dense pack" turbines, Detroit Edison engaged in discussions with the permitting authorities and ultimately filed a request for an applicability determination with EPA on June 8, 1999. Detroit Edison received a response on May 23, 2000, which ultimately indicated that no New Source Review ("NSR") permit was required if no emissions increase occurred as a result of the project. It also advised the Company to report emissions to the then-named Michigan Department of Environmental Quality showing that no emissions increase occurred as a result of the dense pack turbines. Detroit Edison filed an initial notification for each of the four turbine upgrades and each major periodic outage since the NSR reform rules went into effect in 2003. In addition, when filing these notifications and the associated annual reports, guidance related to emissions increase evaluation provided in the Monroe applicability determination has been followed as well as the applicable rules.

11. Detroit Edison applied for, and received on August 2, 2010, a NSR Prevention of Significant Deterioration ("PSD") permit for its fuel optimization and air quality improvement project at Monroe Units 3 and 4, agreeing to take on strict Best Available Control Technology ("BACT")-level limits for NSR pollutants from those sources. In issuing this permit, the Michigan Department of Natural Resources & Environment ("MDNRE") analyzed the environmental impact of all four Monroe Units, including Unit 2, each operating at its full potential to emit (*i.e.*, assuming operations at full capacity 8,760 hours per year), and found that those operations would continue to comply with the applicable National Ambient Air Quality

<sup>&</sup>lt;sup>1</sup> In the Monroe applicability determination, EPA also took the position that the project was not "routine maintenance, repair and replacement" based on an interpretation of that phrase that is completely inconsistent with how it had ever been applied previously. Detroit Edison did not challenge the determination because the ultimate conclusion of the determination was that the project as planned could proceed without NSR permitting.

Standards ("NAAQS"). In addition, MDNRE conducted a thorough BACT evaluation and approved the following BACT limits for  $NO_x$  and  $SO_2$  (in addition to other pollutants) for the two Monroe units: 0.107lb/mmBtu for  $SO_2$  (30-day rolling average); 0.08lb/mmBtu for NOx 12-month rolling average).

#### C. The Monroe Unit 2 Project Work

12. As Vice President of Environmental Management and Resources, I am familiar with the purpose of the recent maintenance and repair work at Monroe Unit 2 ("Unit 2 Project"), which I understand is at issue in this litigation. In particular, a coal-fired boiler is a complex assembly of tubes, tube components, and ancillary equipment (e.g., pumps, burners, fans, economizers, reheaters and superheaters) in which water is heated and turned to steam, which then turns a turbine to generate electricity. Because Detroit Edison's facilities are subject to harsh operating conditions, including high temperatures and pressures, and must be available to provide electricity on demand, Detroit Edison frequently repairs and replaces deteriorating tubes and related components. Like every other electric utility company in the country, Detroit Edison regularly performs maintenance, repair and replacement activities to ensure its units run efficiently and safely and with minimal interruption of service and without injury to its workforce. To perform these activities, Detroit Edison, like every electric utility company in the country, periodically removes its generating units from service for up to three months to perform maintenance work, which cannot otherwise be completed while the unit is in operation (i.e., an outage). This maintenance activity is scheduled to occur during periods when the demand for electricity is less, such as certain periods in the Fall or Spring, so as to avoid the risk of interruption of service to our customers.

- 13. It is my experience from my years working in the industry that such common maintenance, repair and replacement work does not result in emissions increases. Rather, fluctuations in the utilization of the unit and its resultant emissions (both before and after the project), including any increases projected to occur in the years following these types of projects, are usually due to a multitude of factors independent from the project, such as increased demand for the unit, variability in fuel or in emissions control equipment, and other system and market conditions. This was, in fact, the conclusion Detroit Edison reached regarding the Unit 2 Project.
- 14. To my knowledge, no utility company has ever considered such maintenance, repair and replacement projects to be subject to NSR, much less obtained an NSR permit for such work. Indeed, were such projects to require an NSR permit and installation of BACT as a matter of course, no rational company (including Detroit Edison) would undertake such work, because the costs of the permit process and installation of BACT would generally make such a maintenance project extremely uneconomical (unless such controls were being installed for other reasons). It took over two years to obtain the previously-referenced NSR permit for Monroe Units 3 and 4, which would be unworkable if Detroit Edison had to obtain similar permits for each of its periodic outages. In fact, there would be other less costly, lawful options available to Detroit Edison to avoid triggering NSR permitting by ensuring there would be no significant emissions increase due to such a project. Options include (1) implementing administrative and other constraints on the unit as a part of the project to offset any potential increase otherwise associated with the projects; (2) securing a "synthetic minor" permit, which would keep emissions at baseline plus a significance threshold; and (3) "netting" emissions using contemporaneous reductions at the plant. Moreover, because Detroit Edison was planning to install advanced emission controls on Monroe Unit 2 in the near future, it may have chosen to

simply postpone the maintenance work until it was ready to proceed with the pollution controls and the permitting for those controls.

#### D. NSR Notification Policy and Notification of the Unit 2 Project

15. Before commencing work involving a major planned outage at a Detroit Edison facility, such as Monroe, Detroit Edison submits a detailed planned outage notification to the MDNRE. The information included in these notifications is based on meetings with MDNRE and are regularly submitted to the agency for outages at the plant in accordance with the applicable regulations and with Detroit Edison's conservative policy of notifying the State of a planned outage even if it believes there is "no reasonable possibility" that activities during a planned outage trigger the requirement for an NSR permit.<sup>2</sup> These notifications explain the scope and purpose of the project, the length of the particular outage, whether the project will result in any significant increase of emissions from the unit, and whether or not Detroit Edison believes the project triggers any permitting obligations under the Clean Air Act and/or Michigan's State Implementation Plan ("SIP"), which govern certain air emission sources within the State, including Monroe Unit 2. Detroit Edison regularly communicates with the MDNRE, and MDNRE was aware of the Monroe Unit 2 Project before the final submission. With regard to this work, Detroit Edison creates and maintains the information required by Mich. Admin. Code R. 336.2818(3)(C), and has provided that information to EPA when requested.

<sup>&</sup>lt;sup>2</sup> The rules require pre-project notifications for electric utilities for projects where there is a "reasonable possibility" of a significant emissions increase that is not part of a major modification. Out of an abundance of caution, and in the interest of transparency and open communications with the permitting authority, Detroit Edison in 2003 adopted a conservative policy of submitting such notifications for any "planned outage" including at least one capital project with an estimated cost of \$250,000 or more, regardless of whether the work is considered

16. I disagree with the statement made by EPA's Ethan Chatfield in his declaration regarding a September 14, 2009 meeting where EPA and Detroit Edison discussed a broader Notice of Violation that EPA had issued to the Company on July 24, 2009 ("2009 NOV"). I attended the meeting along with others from Detroit Edison and our counsel. According to Chatfield, EPA attorney Sabrina Argentieri explained that EPA generally disagreed with Detroit Edison's analyses of NSR applicability in its notification letters and invited William Brownell, counsel for Detroit Edison, "multiple times" to contact her to discuss in detail why EPA disagreed with the analyses. Declaration of Ethan Chatfield, ¶¶ 25-26. My recollection of the meeting is exactly the opposite. Mr. Brownell explained that the Company's purpose for submitting these notification letters and analyses to MDNRE, even for projects that the Company believes do not require them in the first place, is to go above and beyond what is required for compliance. Mr. Brownell then specifically asked EPA and Ms. Argentieri to explain why they did not believe Detroit Edison's NSR analyses were correct, so that the Company could adjust its notifications as appropriate. He received no specific response at the meeting, nor to my knowledge, has he or the Company ever received such a response from Ms. Argentieri or any other EPA staff. Instead, Ms. Argentieri stated that the purpose of the meeting was to discuss settlement and not to address the merits of any claims in the 2009 NOV or the Company's notifications. She added that it might be possible to have discussions regarding notifications on a "parallel track" to settlement discussions, but that she would have to discuss the issue with other EPA personnel first to determine whether that is possible. Ms. Argentieri has never contacted Detroit Edison or its counsel about such "parallel track" discussions.

routine maintenance, repair and replacement or has a reasonable possibility of increasing emissions.

17. With respect to the work at Monroe Unit 2, which involved primarily economizer, reheater and waterwall replacements, Detroit Edison sent such an outage notification to MDNRE before the work began, and explained why these activities (1) constituted routine maintenance, repair and replacement under EPA's historic and Michigan's interpretation of that term; and (2) would not result in a significant emissions increase. For these two independent reasons, Detroit Edison further explained that the work did not trigger any permitting obligations under the Clean Air Act and/or Michigan's SIP. With respect to the emissions increase analysis, Detroit Edison explained that it relied on the Company's projections that had been recently submitted to the MPSC as a part of the Company's 2010 Power Supply Cost Recovery ("PSCR") filing submitted in September 2009. These projections, which were done using a complex "production cost model" called PROMOD and incorporated system assumptions and predictions, showed that Monroe Unit 2 would be projected to have higher emissions of NO<sub>x</sub> and SO<sub>2</sub> in 2013 than in the baseline period As required under the NSR regulations, Detroit Edison then excluded from the projections any emissions increases that are unrelated to the Unit 2 Project (because they are related to the system assumptions in the PROMOD model) and that the unit could have accommodated in the baseline period (because the unit had substantially higher availability in the baseline period than its expected utilization after the Unit 2 Project). See Letter from Kelly Guertin, Detroit Edison, to William Presson, MDNRE (Mar. 12, 2010), Decl. Ex. 2 at 2-3 and Table 1; Letter from M. Solo, Detroit Edison, to S. Argentieri, EPA Region 5 (June 1, 2010), Decl. Ex. 3 at 2-5. MDNRE did not question Detroit Edison's determination at the time it received Detroit Edison's notification. Nor has MDNRE questioned it since that time.

18. The work at Monroe Unit 2 commenced on or about March 13, 2010, and concluded on June 20, 2010. Monroe Unit 2 is currently operating and is subject to the Court's order to continue operating at no more than pre-Unit 2 Project levels.

#### E. Discussions with EPA and Impact of Relief Requested by the Agency

- 19. In a series of letter exchanges with EPA, Detroit Edison explained further its conclusions with regard to the Monroe Unit 2 work not constituting a "major modification," including the independent factors causing any projected emissions increase and its exclusion of emissions that could have been accommodated prior to the project. *See* Decl. Ex. 3 at 2-5; Letter from M. Solo, Detroit Edison, to M. Palermo, EPA Region 5 (June 23, 2010), Decl. Ex. 4 at 1-4.
- 20. Nevertheless, on June 4, 2010, EPA issued a formal "Notice and Finding of Violation" ("2010 NOV") to Detroit Edison, claiming that the work at Monroe Unit 2 constituted "major modifications under the [CAA] and the Michigan implementation regulations." During a short telephone call the afternoon of June 16, EPA told Detroit Edison that it was not interested in discussing the legal basis for the 2010 NOV or EPA's position regarding the adequacy of the notification that Detroit Edison had provided to MDNRE before the project. Rather, EPA presented Detroit Edison with its demand for substantial emission reductions at other plants unrelated to the Monroe work and told the Company that it had one week to accept this demand.
- 21. EPA appears to base much of its 2010 NOV and subsequent Complaint on an article that appeared in the April 22, 2010 edition of a local newspaper entitled "Extreme makeover: Power plant edition." While the article describes the work at Monroe Unit 2 in somewhat expansive terms, it appears to focus mainly on the statements of a contractor,

apparently eager to highlight the jobs that the work created in Michigan, a State which has suffered rising unemployment in the last several years.

- 22. In light of the parties' ongoing dispute and to alleviate any concern regarding any potential actual emission increases from Monroe Unit 2 during the dispute, Detroit Edison advised EPA that, barring unforeseen emergency circumstances, it would commit to manage the operation of the unit to assure there is no increase in annual emissions from Monroe Unit 2 for any reason, including those specifically allowed by the regulations. *See supra* Decl. Ex. 4 at 4. EPA ignored this commitment and filed its Complaint and Motion for Preliminary Injunction.
- million in additional capital and \$14 million in annual operating costs, and it further states that this amount is "minimal" when compared to Detroit Edison's current plans to spend \$630 million on new control retrofits at Monroe Unit 2. EPA's declarants have substantially underestimated the costs of their proposed "interim" remedy. See Declaration of William C. Rogers. But even if the cost to Detroit Edison were \$39 million only (excluding the additional \$14 million that EPA claims as operating costs), it would comprise capital outlays that would have to be raised in addition to the capital that Detroit Edison must obtain to fund its \$2 billion control equipment construction plan and to maintain the system to provide reliable electric service at the lowest, prudent cost to Michigan ratepayers. This additional capital is not a small amount of capital to raise at this time, especially in the current economic climate and given the many millions of dollars in additional annual operating costs associated with running such controls at other plants.
- 24. Detroit Edison estimates that the charges related to the latest portion of its existing \$2 billion emissions controls construction at Monroe and other required maintenance

expenditures will require it to raise its rates and this is occurring during a time that our customers have considerable challenges paying current rates. MPSC is focused on limiting the amount of rate increases when possible to manage customer affordability. An additional charge of \$39 million for interim controls that EPA now seeks from this Court would represent a further and unnecessary increase in rates, with an additional amount borne by Detroit Edison if that cannot be passed through to its customers. The rate increase likely would be substantially more, because EPA's declarants have substantially underestimated the cost of operating such controls. Therefore, EPA's requested relief would impose significant costs on Detroit Edison's consumers and the Company itself.

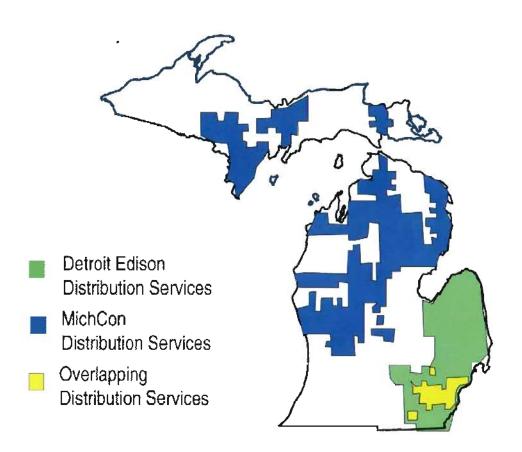
I declare under penalty of perjury that the foregoing is true and correct.

Executed this \_\_\_\_\_ day of November, 2010.

Skiles W. Boyd

# Boyd Declaration Exhibit 1: Information on Detroit Edison's Power Plants and the Monroe Power Plant

## Detroit Edison General Information and Service Areas



#### **Detroit Edison**

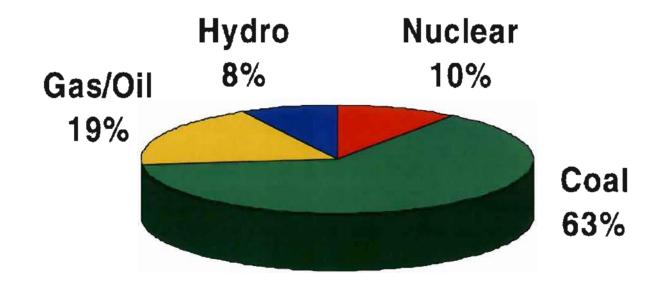
- Founded in 1903.
- Ninth largest electric utility in the U.S. with 2.1 million customers
- Over 11,000 MW of power generation, primarily coal fired
- Fermi 2 nuclear plant is a top industry performer
- 54,000 GWh in electric sales
- ~\$4.7 billion in revenue

# Some of Detroit Energy's Generation Facilities





# Detroit Edison's Generation Portfolio – Type of Fuel

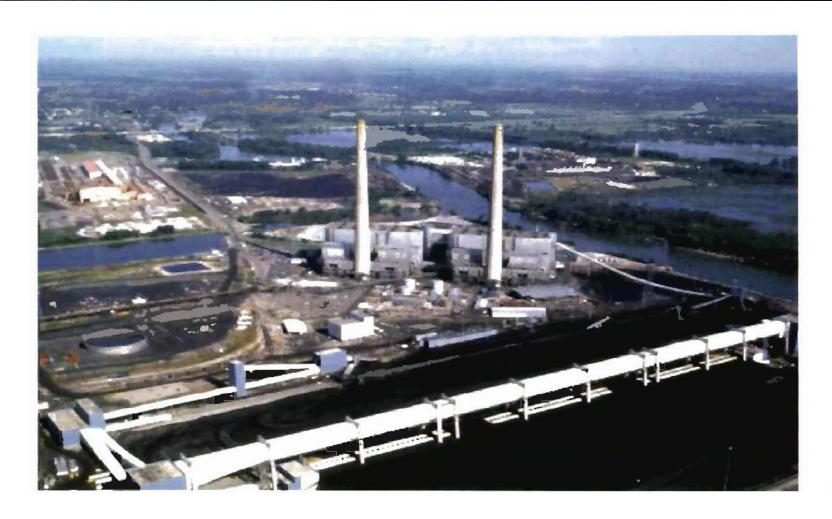


Coal is the primary fuel utilized by DTE Energy's Generation fleet

# Detroit Edison's Variable Generation Fleet Capacities

Plant Location	Capacity MW	% of Total Generation	# Units	First Generating in	Employees
Monroe	3,135	35%	4	Early 70's	470
Fermi II	1,131	16%	1	1988	930
Belle River	1,026	15%	2	1984	232
St. Clair	1,402	13%	6	Early 50's	409
Trenton Channe	725	9%	3	1949	213
Ludington	917	6%	6	1967	
River Rouge	527	5%	2	1956	75
Greenwood	785	1%	1	1979	69
Harbor Beach	103	>1%	1	1968	22
Connors Creek	215	>1%	2	1958	30

# The Monroe Power Plant



# History of the Monroe Power Plant

- Design started in 1966
- Unit 1 went into service in 1971, and Unit 4 in 1974 with all 4 units currently operating Monroe Power Plant generates about 3,335 MWhrs
- The Fuels and Emissions Project started in the 1970's, to comply with the Clean Air Act: this lead to the installation of the largest Fuel Blending Systems in the country, including
  - Blending facilities
  - Coal Mills
  - Fuel Gas Conditioning
- In 1994, started the installation of LoNOx burners
- In 2002, started in service testing of the Selective Catalytic Reduction (SCR) unit, on Unit 1 and currently Units 1, 3 & 4 are operating with SCRs.

# Unique Features of the Monroe Power Plant

- Located on 1,200 acre site and it is the largest generating plant in the State of Michigan and the 5<sup>th</sup> in the country.
- Monroe Power Plant produces about 35% of DTE Energy's electrical power and 44% of Fossil Power.
- With more than 400 permanent employees and 100 long term contract employees, along with 500-800 temporary construction employees for the Environmental Project, Monroe is one of the largest employers and taxpayers in Monroe County
- At full load the plant will consume 32,000 tons of coal per day and on a average year the plant will burn 8 - 9 million tons of coal.
- Monroe Power Plant has a capacity of 3,135 MWs or 3,135,000 kilowatts
- The plant generates about 16 18 million MWs per year

# Monroe's Fuel Blending System

- Can blend three types of coal to optimize output
  - Low Sulfur Western
  - Low Sulfur Southern
  - Mid Sulfur Eastern
- Receives 8 9 million tons of coal per year via Rail and Vessel
- · Over 10 miles of conveyors
- · Average train is 120 cars each carrying 100 tons of coal
- Ships unload 28,000 to 40,000 tons depending on river depth

## Monroe Power Plant Environmental Achievements

- Reduced SO2 emissions, via Fuel Blending
- Reduced NOx emissions via LoNOx Burners
- Reduced NOx emissions via SCR
- Plant gained Wild Life Habitat in 2001
  - As part of this effort, MPP employees have identified 151 species of mammals, reptiles, and birds on site
  - 9 endangered species of mammals and birds can be found on site, along with one plant species.
- Plant was ISO 14001 Certified in 2003
- State of Michigan Lotus Blossom Habitat
- Past winner of Monroe County Corporate Citizen of the Year

# Detroit Energy's Environmental Stewardship

- 1920s First utility to install ESPs Trenton Channel PP
- 1970s Ploneered fuel blending Monroe PP
- 1980s Voluntary and accelerated removal of PCB equipment
- 1990s 2006
  - DOE Climate Challenge Program planted 23+ million trees in Michigan, increased system efficiencies, biomass development, etc.
  - ISO 14001- All 8 major power plants
  - Clean Corporate Citizen Fermi 2 certified
  - Wildlife Habitat Council member 9 sites certified
  - Award-winning partner in Greenways trails development, wildlife research and organizational support
  - Green Team (employee environmental volunteers) works on company property and in the communities we serve

# SCR Installation Helps Reduce Majority of NO<sub>x</sub> Emissions

## Nitrogen Oxides (NO<sub>x</sub>)

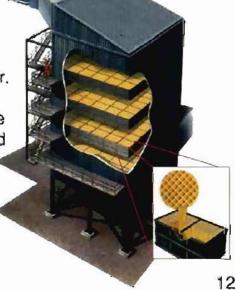
NO<sub>x</sub> emissions from fossil fuel-fired boilers arise from the nitrogen compounds in the fuel and molecular nitrogen in the air supplied for combustion. Conversion of molecular and fuel nitrogen into NO<sub>x</sub> is promoted by high temperatures and high volumetric heat release rates found in boilers. NO<sub>x</sub>, along with emissions from other sources like volatile organic compounds from cars, have been identified as precursors to ozone and fine particulate (PM2.5) which has been associated with respiratory disorders, corrosion and degradation of materials and damage to vegetation.

## Selective Catalytic Reduction (SCR)

- Controls 90%+ of NO<sub>x</sub> Emissions
- One Monroe SCR will control 18% of the forecasted fleet NO<sub>x</sub> emissions

 Installed in high temperature flue gas stream after the boiler

Ammonia in the presence of a catalyst converts
 NO<sub>x</sub> to inert nitrogen and water. Periodic replacement of the catalyst is required



# Monroe SCR Project



Unit 3 SCR, Complete



Unit 3 ID Fans, Complete

- Major retrofit effort in a very congested area significantly impacts cost
- Existing design of boilers and auxiliaries has led to additional scope not experienced at most plants retrofitting SCR's
- More than 7,000 tons of structural steel and ductwork added to back of each unit
- Performing most of the work with units on-line, with tie-ins during scheduled outages
- >3.5 million local labor man-hours employed on U1, U3, U4
   & U2A to date
- Major strategy change on Unit 3 SCR employed the delivery of large pre-fabricated duct modules by barge
- Approximately \$839 million spent on SCRs and U2A

# SO<sub>2</sub> Emissions Are Reduced by Installing Scrubbers

## Sulfur Dioxide (SO<sub>2</sub>)

The burning of coal fossil fuels causes sulfur dioxide (SO<sub>2</sub>) to be emitted into the atmosphere. SO<sub>2</sub> emissions form atmospheric sulfates which are a contributor to PM2.5. When gaseous SO<sub>2</sub> combines with water, it forms a dilute aqueous solution of sulfurous acid. Sulfurous acid can easily oxidize in the atmosphere to form sulfuric acid (H<sub>2</sub>SO<sub>4</sub>). Dilute sulfuric acid is a major constituent of acid rain.

# Flue Gas Desulturization (FGD) Commonly referred to as a Scrubber

Controls 95%+ of SO<sub>2</sub> Emissions

 One Monroe FGD will control 12% of the forecasted fleet SO<sub>2</sub> emissions

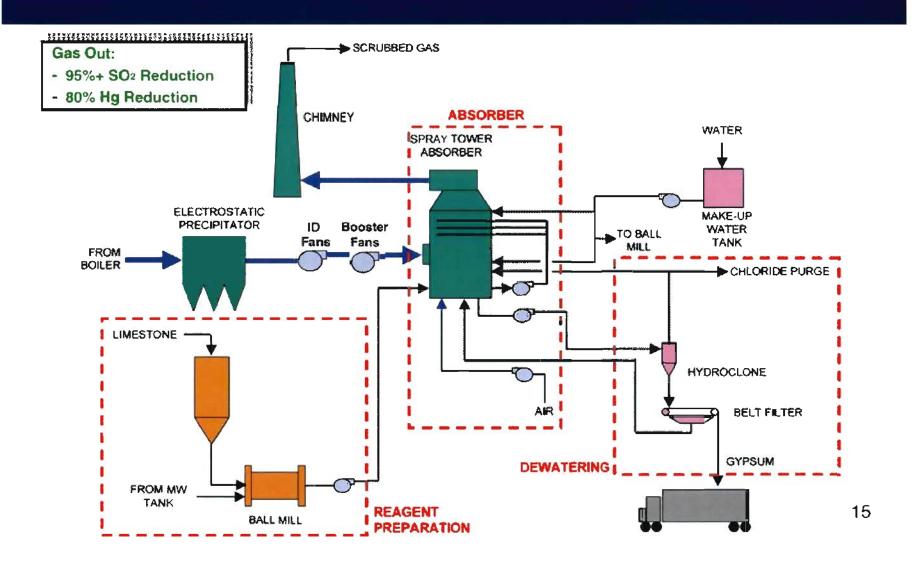
 Installed in flue gas stream immediately before stack

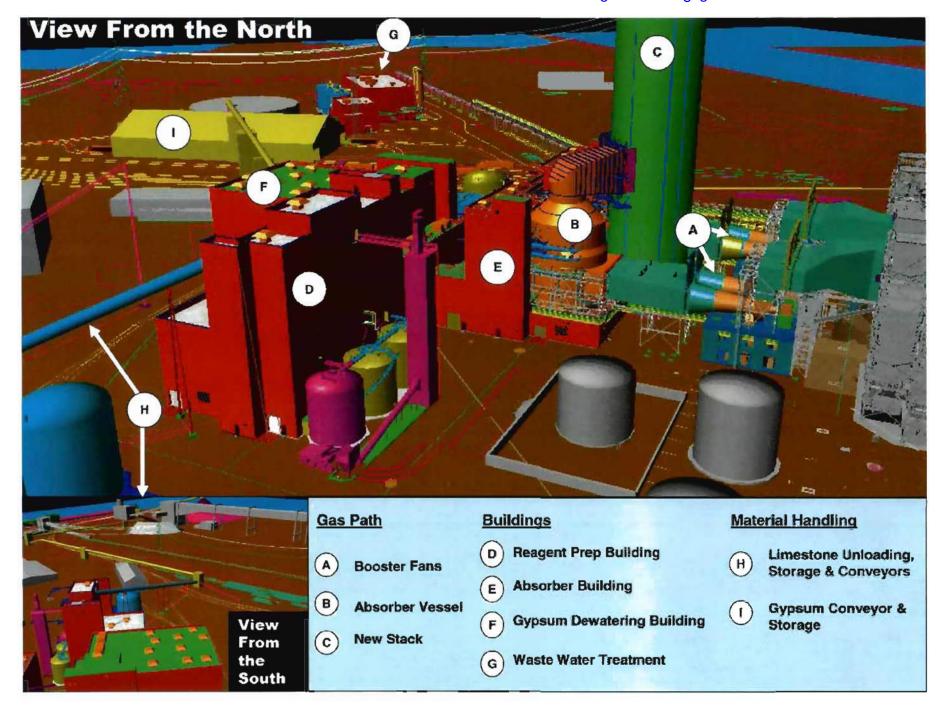
 Uses limestone as a reagent and produces a marketable gypsum byproduct

 85% of installed SO<sub>2</sub> scrubbers are wet scrubbers, the balance are dry scrubbers



## **Scrubber Process**





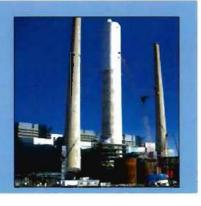
# Installation of Scrubbers Will Change the Appearance of Monroe's Plume

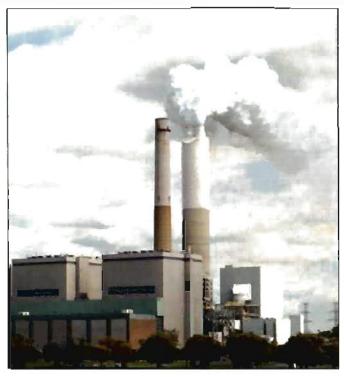
### Saturated Flue Gas

The Flue Gas Desulfurization process is a wet process. The limestone that reacts with the SO<sub>2</sub> is made into a slurry and sprayed into the flue gas's path. During this process Water evaporates. This moisture will be visible as the flue gas exits the new chimney.



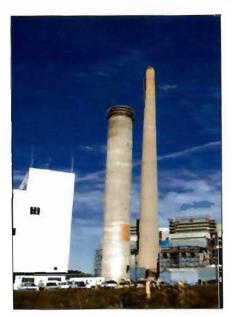
This change in flue gas characteristics is the reason a new chimney is required as part of the Monroe scrubber project





This picture is an example of what a water saturated plume looks like. A wet-scrubber similar to the one being built at Monroe is installed on this power plant

# Monroe Flue Gas Desulfurization Project



**New Chimney** 

- Erected new emissions stack with two FRP flue gas liners (one per unit)
- Once operational, continuous vapor plume from FGD operation will be visibly different than current stack emissions
- Erect material handling systems for limestone receipt via barge and commercialgrade gypsum by-product removal via truck
  - Barge and truck traffic to MPP will increase significantly once operational
- Erection of significant increase in rotating equipment and process control
  - Essentially adding chemical processing plant equipment comparable to a power plant in size/complexity without added benefit of a turbine-generator
- Relocation of the 345 KV high-voltage transmission line within Monroe Power Plant property
- The scrubber technology chosen has been proven in both national and world-wide utility marketplaces
- Approximately \$1.2 billion estimated on four scrubbers and common equipment at Monroe



Liner Installation



Reagent Prep

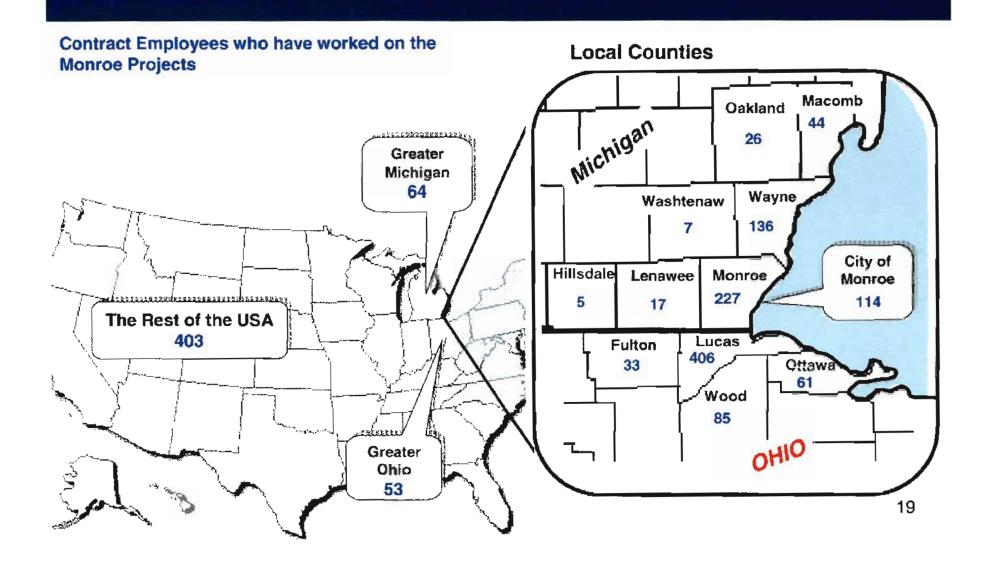


Stebbins Tile



Absorber Erection

# Economic Impact of Environmental Projects at Monroe



# Boyd Declaration Exhibit 2: March 12, 2010 Planned Outage Notification

# 2C163ecv2-11301-01-133410-1RBWF-R20VV# 1D07cv2metrilted100-61/09711.4d/iPtg/044/tot/58Pageg41Do475481

DTE Energy Company One Energy Plaza, Detroit, MI 48226-1221

### DTE Energy

# VIA CERTIFIED MAIL



March 12, 2010

Mr. William Presson, Acting Section Supervisor Permit Section Air Quality Division Michigan Department of Environmental Quality 525 W. Allegan Constitution Hall - 3rd Floor North Tower P.O. Box 30260 Lansing, MI 48933

Re: 2010 Planned Outage Notification - Monroe Power Plant (B2816), Unit 2

Dear Mr. Presson:

DTE Energy periodically removes its generating units from service for up to three months to perform maintenance, repair, and replacement activities that cannot otherwise be done with the unit in operation. Typically, this occurs on a 2-3 year cycle. Occasionally a unit is taken out of service for a planned shorter duration to perform less extensive work. During the upcoming twelve (12) week outage at the Monroe Power Plant on Unit 2 that begins on or about March 13, 2010, the following major projects are being undertaken: (1) boiler system repairs and replacements; (2) turbine repairs and replacement; (3) electrical repairs and replacement; and (4) draft system repairs and replacement. These project are exempt under Michigan air rules and no permitting activity is required (see Attachment A). In the electric utility industry, these projects represent routine maintenance, repair and replacement activities.

We are providing notice that these projects are taking place based on the recently promulgated Michigan Prevention of Significant Deterioration (PSD) rules [R336.2801-2830] that became effective on December 4, 2006. Prior planned outage notifications were submitted under the federal New Source Review (NSR) rules promulgated on December 31, 2002 and that became effective in Michigan on March 3, 2003 (the 2002 rules). The 2002 rules required notification, additional record keeping, and annual reporting whenever "there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase...." For the reasons discussed below, DTE Energy continues to believe there is no reasonable possibility that the proposed project will result in a significant emissions increase and thus, the requirements do not apply. However, until USEPA and/or the federal courts provide a clear definition of what constitutes routine maintenance, repair and replacement, DTE Energy will follow the requirements of Michigan Air Rule 1818(3). Accordingly, this outage notification for Monroe Unit 2, and all subsequent outage notifications submitted by DTE Energy will continue to follow the format of prior notifications, even though there is no expected increase in emissions as a result of the planned projects. We continue to believe this notice is not required by federal or state regulations.

# 2C163:ev2-11301-01-133410-7RBWF-RBWF-RBWV/# 1000c-22m & Finite 460-46/097114:d 1Pty/042/10158Pageg4120047542

Mr. William Presson March 12, 2010 Page 2 of 5

2010 Planned Outage Notification Monroe Power Plant (B2816) - Unit 2

The NSR applicability test requires a comparison of past actual and projected emissions. "Baseline actual emissions" are defined in Michigan Air Rule (MAR) 1801(b). The baseline period for defining past emissions for Monroe Unit 2 was originally established for the 12 week outage in February 2005 to be the two-year period in calendar years 2000-2001. That baseline is being replaced for this periodic outage. The new baseline is May 2005-April 2007. Net generation and capacity factor data for the new period were obtained from the DTE Energy Power Plant Performance Management (P3M) system records. Particulate emissions were based on fuel characteristics and EPA emission factors. Heat input, sulfur dioxide, and nitrogen oxide emissions were obtained from continuous emission monitoring system (CEMS) data presented in the EPA Annual Acid Rain Scorecard reports. Baseline emissions and other operating characteristics are shown in Table 1.

It should be pointed out that emissions and operations fluctuate year-to-year due to market conditions and in any individual year could very well exceed baseline levels. Obviously, since the baseline represents a 2-year average, one of those years was above the baseline and one below. At some point in the future, baseline levels may be exceeded again, but not as a result of this outage. Future unit utilization is also a function of expected electricity market conditions. Many factors influence market demand — weather, availability of other units, transmission limitations, electrical system security, etc. Moreover, fuel quality could change. As mentioned above, the Michigan air rules direct one to exclude from projected actual emissions "...that portion of the unit's emissions following the project that an existing unit could have accommodated ... and that are also unrelated to the particular project," including increases due to demand growth or fuel quality changes per MAR 1801(II)(II)(C).

Additionally, Part 18 of the Michigan Air Rules allows an existing utility steam generating unit to use a different baseline period for each pollutant under the definition of "Baseline Actual Emissions" in R336.2801(b)(i)(C) as follows:

"(C) For a regulated new source review pollutant, if a project involves multiple emissions units, then only 1 consecutive 24-month period shall be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period may be used for each regulated new source review pollutant." [Emphasis added]

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Mr. William Presson March 12, 2010 Page 3 of 5

2010 Planned Outage Notification Monroe Power Plant (B2816) - Unit 2

Accordingly, a pollutant-specific baseline for sulfur dioxide ("SO<sub>2</sub>") was chosen as July 2006-June 2008. The pollutant-specific baseline for nitrogen oxides ("NO<sub>X</sub>") was chosen to be October 2006-September 2008. The pollutant-specific baseline for particulate matter (PM) was chosen to be January 2008-December 2009.

All of the replacement components are identical or functionally equivalent to the equipment now in service, and they do not change the basic design parameters of Monroe Unit 2, which will continue to meet enforceable emission and operational limitations. Moreover, the Utility Air Regulatory Group (UARG), an organization of which DTE Energy is a member, has submitted to the EPA NSR Docket during prior comment periods a list of repair and replacement activities that utilities must perform to keep electric generating facilities operational. These activities are considered routine in the electric utility industry. Furthermore, MAR 1801(aa)(iii)(A) specifies that routine maintenance, repair and replacement activities are not major modifications. Therefore, Part 18 requirements do not apply to these projects.

If you have questions on this notice, please contact me at (313) 235-4698 or via email at gossiauxk@dteenergy.com or you may contact Mr. Wayne Rugenstein at (313) 235-7023 or via email at rugensteinw@dteenergy.com.

Regards,

Kelly L. Guertin

Staff Environmental Engineer

Wayn a. Cleyenst

Environmental Management & Resources

Attachments

FILE: MONPP U2 Planned Outage 2010 - NSR Notification.docx

Cc:

C. E. Jennings

R. C. Larlham

Scott Miller - AQD Jackson

F. D. Warren

<sup>&</sup>lt;sup>1</sup> DTE has previously provided to your office a copy of the UARG document as part of the Monroe Unit 1 Planned Maintenance Outage Notification dated January 21, 2004.

Mr. William Presson March 12, 2010 Page 4 of 5

2010 Planned Outage Notification Monroe Power Plant (B2816) - Unit 2

### ATTACHMENT A

Monroe Power Plant Unit 2 Outage Summary

The following activities will be performed during the outage scheduled to begin on or about March 13, 2010, and are exempt under the Michigan Air Pollution Rules as outlined below:

- Boiler System Repairs and Replacements Replacement of economizer tubes; replacement of reheat pendants; replacement of a section of water wall tubes and burner cells; and boiler tube chemical cleaning with the replacement of 210 valves. These activities are exempt under MAR 285(a).
- Turbine System Repairs and Replacements Rewind MTG rotor; install static exciter; replacement of generator lead box; overhaul of north boiler feed pump turbine & rebuild south boiler feed pump; and install boiler feed pump TSI. These activities are exempt under MAR 285(a).
- Electrical System Repairs and Replacements Replace system service transformer #62; replace 4160V cables from system service transformers; rebuild 9-4160V circuit breakers. These activities are exempt under MAR 285(a).
- Draft & Fuel Burning Repairs and Replacements Replace ten air heater gas side expansion joint. This activity is exempt under MAR 285(a).

Mr. William Presson March 12, 2010 Page 5 of 5

2010 Planned Maintenance Outage Monroe Power Plant (B2816) - Unit 2

# Table 1 Monroe Power Plant - Unit 2 Comparison of Actual and Projected Actual Emissions & Operations

	Baseline Actual per MAR 1801(b) <sup>(1)(2)</sup>	Pollutant - Specific Baseline Actual Emissions for NO <sub>X</sub> per MAR 1801(b) <sup>(1)(2)</sup>	Pollutant - Specific Baseline Actual Emissions for SO <sub>2</sub> per MAR 1801(h) <sup>(f)(2)</sup>	Pollutant - Specific Baseline Actual Emissions for PM per MAR 1801(b) <sup>(1)(2)</sup>	PROMOD Projection per MAR 1802(II)(II)(A) <sup>(3)</sup>	Emissions Excluded per MAR 1802(II)(ii)(A) <sup>(3)</sup>	Projected Actual Emissions per MAR 1802(il)(ii)	Emission Chauge
Period	May 2005-April 2007	October 2006-September 2008	July 2006-June 2008	January 2008-December 2009	January 2013-December 2013			
Unit Electrical Capacity, MW	795	795	. 795	795	795			·
Net Generation, MWh	4,983,296				5,748,000			
Annual Capacity Factor	85.5%				82,5%			
Heat Input, mmBtu	47,335,146	44,343,031	45,802,027	43,742,775	54,974,000			
SO2, lb/mmBtu			1.32		1 23			
NOx, lb/mmBtu		0.47			0.53			
PM, lb/mmBtu				0.02	0.02			
SO2, tons			30,115		33,816	3,701	30,115	0
NOx, fons		10,398			14,494	4,096	10,398	0
PM, tons				498	615	11.7	498	0

### Notes:

- (1) Michigan Air Rule (MAR)
- (2) Baseline values are a 12-month average of a selected 24-month consecutive operating period
- (3) PROMOD projections are based on the maximum utilization for the period 2010-2014 as shown in the DTE Energy Detroit Edison Power Supply Cost Recovery (PSCR) 2010 Annual Report (dated 9-10-09) as required by the Michigan Public Service Commission

FILE: Monroe 2 Notification Data - Table 1.xls TAB: MONPP U2 NSR Notice 3-2010

# Boyd Declaration Exhibit 3: June 1, 2010 Detroit Edison letter to EPA

DTE Energy Company One Energy Plaza, Detroit, MI 48226-1279



MICHAEL J. SOLO, JR. Attorney (313) 235-9512

June 1, 2010

Sabrina Argentieri
Associate Regional Counsel
U.S. Environmental Protection Agency—Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Request to Provide Information Pursuant to the Clean Air Act

Dated May 28, 2010

To Whom It May Concern:

Enclosed with this letter please find The Detroit Edison Company's ("Detroit Edison") response to the United States Environmental Protection Agency's ("EPA") Request to Provide Information Pursuant to the Clean Air Act ("Information Request"), dated May 28, 2010. The Information Request sent late on Friday afternoon prior to the Memorial Day Holiday weekend afforded Detroit Edison approximately one business day to provide its response. Due to this unreasonably short period of time for Detroit Edison to provide the requested information, and due to significant logistical issues in determining all of the potential additional information available to respond to the Information Request, Detroit Edison's reserves the right to amend or supplement this response.

Detroit Edison objects to the extent the Information Request is: (1) not related to whether Detroit Edison has been in compliance with applicable provisions of the federal Clean Air Act; (2) seeks information that is confidential and/or privileged; and/or (3) beyond the scope of EPA's legal authority. Further, by providing this response, Detroit Edison does not admit or acknowledge any noncompliance whatsoever with regard to the Clean Air Act, the Michigan State Implementation Plan or any other matter.

In the May 28, 2010 Information Request, EPA requested that Detroit Edison provide the date that it currently expects to complete the Monroe Power Plant's Unit 2 Outage. Detroit Edison expects that the current outage will be concluded on June, 9 2010. Detroit Edison also anticipates limited operation and testing of the unit prior to the conclusion of the outage.

Sabrina Argentieri Page 2 June 1, 2010

EPA further requested information that Detroit Edison believes supports the contention that the work being performed does not require a permit. As set forth in DTE's March 12, 2010 planned outage notification letter to the permitting authority, the Michigan Department of Natural Resources and the Environment ("MDNRE"), this project does not require a permit because it is (1) routine maintenance, repair and replacement ("RMRR") under EPA's historic and Michigan's implementation of that term; and (2) the project would not result in a significant emissions increase.

With respect to RMRR, the project consists primarily of tube component replacements, similar to hundreds of such replacements in the industry and within DTE's system. As a matter of fact, Michigan Air Pollution Rule 285 (a) specifically exempts the tube and generator repair as examples of RMRR.

With respect to emissions increase, as discussed more fully below, Detroit Edison has thoroughly evaluated the project, as it has done for virtually every large outage over the last decade. Detroit Edison has carefully complied with the direction provided by the EPA on May 23, 2000 in response to the company's requested applicability determination on a project at the same plant at that time. We have consistently reported maintenance, repair and replacement projects to the MDNRE with baseline emissions and projected emissions, excluding "emission increases that are caused by other factors, for example, emission increases ... due to variability in control technology performance or coal characteristics," and, "that portion of its emissions attributable to increased use at the unit due to the growth in electrical demand for the utility system as a whole since the baseline period." MDNRE is intimately familiar with Detroit Edison's methodology for making these analyses, and it has never questioned any of Detroit Edison's submittals, including the one at issue here for the Monroe Unit 2 project. The applicable regulations call for a comparison of "projected actual emissions" and "baseline emissions" to determine whether a project would result in a significant emissions increase. To account for the statutory requirement of causation, the regulations require the Company to

Exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project, including any increased utilization due to product demand growth.

MAR 1801(II)(ii)(C). In addition, the regulations require the Company to

Sabrina Argentieri Page 3 June 1, 2010

Consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the state or federal regulatory authorities, and compliance plans under the state implementation plan.

# MAR 1801(II)(ii)(A).

One fact that was clear to the MDNRE but that EPA may not have been aware of is that Monroe Units 1 and 2 share a stack. As a result, in the past, emissions from the two units have been prorated based on electrical generation. Beginning in 2013, we are projecting emissions separately, as Unit 1 will exhaust to a separate stack because it will be outfitted with a flue gas desulfurization (FGD) system and a new stack. As a result, the baseline year is actually based on the average emission rate between a unit controlled with SCR and one that is not controlled.

Detroit Edison recognizes that the regulations require essentially two steps in determining the "projected actual emissions" for the unit. First, the Company must project emissions for five years after the project, based on the Company's general methodologies for estimating future utilization and emissions, and accounting for all relevant information as of the date of the projection. Second, the Company must exclude increased emissions that (1) are unrelated to the project and (2) could have been accommodated in the baseline period.

Accordingly, in evaluating this project, Detroit Edison first used its then current system-wide projection, which it had already filed with the Michigan Public Service Commission. That projection used PROMOD, a production cost model widely used in the industry for short to medium range projections. The model used to make these projections did *not* include any changes to the characteristics of the unit based on the project, because the project is not expected to affect the performance characteristics of the unit as compared to its characteristics before the project. Thus, while the model projected increases in the unit's utilization and emissions as compared to the baseline, those increases are completely unrelated to the project. They are due to (then) expected increased demand on the unit as a result of myriad factors, including most notably an increase in demand for the system as a whole and an extended outage for Monroe Unit 1 in 2013 for the purpose of tying new environmental controls for that unit (a scrubber).

It should be noted that at the time of the March notification, a primary driver for a projected increase in generation (and commensurate projected

Sabrina Argentieri Page 4 June 1, 2010

increase in emissions) from the Monroe Power Plant was an expected increase in power demand accompanied by an increase in energy cost by \$5.85/MWh. This increase in power demand, and increased costs of power, led to an increase in power demanded from Monroe Unit 2. This increase in power demand led to the following other factors affecting emissions:

- Monroe 2 has no periodic outage scheduled for 2013, while it had outages planned in 2010, 2012 and 2014, three of the other years that were evaluated as part of the letter. Significant work (tie-in of a new FGD) is planned for Monroe Unit 1 and Monroe Unit 2 must help make up the difference in electricity demand. The plant does not generally schedule outages on more than one unit per year and will not overlap outages.
- An increase in demand from all the units in Detroit Edison's portfolio. For example, Monroe units were expected to increase generation from a projected 15,398 MW-hrs in 2010 to 19,172 MW-hrs in 2014, as reported in the PSCR report last fall. The entire fossil generation portfolio was expected to increase generation from a projected 44,595 MW-hrs in 2010 to 48,617 MW-hrs in 2014.
- Monroe can accommodate and has historically accommodated a wide range in fuel blends and this fuel variability is allowed under our permit as well as referenced in our Monroe Applicability Determination. Beginning in 2013, all the Monroe units will be blending significantly less low sulfur western coal, about a 3% drop in weight from 2012.

Notably, the scenario reflected in the PROMOD projections reported in the March notification is not the case any longer, as the cost of natural gas has dropped significantly. But this information was not available when the PSCR forecast was submitted last fall. If current information were used, it is unlikely that we would have even projected increased demand (and emissions) for this unit.

As noted earlier, an increase in utilization due to "demand growth" can be excluded from emissions increase estimates, as it was in Detroit Edison's analysis. Just as a note of interest, although the projections made in our March 12, 2010 notification were based on the latest official PROMOD run, it is now believed that emission projections will be less due to the continuing lower price of natural gas and the slower economic recovery of the area.

Detroit Edison also determined that the projected increases could have been accommodated in the baseline period. Specifically, the projected capacity factor for 2013 for Monroe Unit 2 is 82.5%. During the baseline period of May, 2005 through April, 2007, the equivalent availability factor of the unit was approximately 85.2%, and thus the unit could have accommodated the projected increase. As a result, Monroe Unit 2 could have generated the 5,478,000 MW-hrs

Sabrina Argentieri Page 5 June 1, 2010

described in our letter, had the market required the electricity during our baseline period.

I trust that you will find this response to the Information Request satisfactory. If you have any questions regarding this submission, please contact the undersigned.

Very truly yours,

Michael J. Solo, Jr.

MJS/dmc Enclosure

cc: William Presson, MDNRE

Mark Palermo, EPA Region 5 Ethan Chatfield, EPA Region 5 Skiles Boyd, Detroit Edison

William Brunell, Detroit Edison Counsel

# Boyd Declaration Exhibit 4: June 23, 2010 Detroit Edison letter to EPA

DTF Energy Company One Energy Plaza, Detroit, MI 48226-1279



MICHAEL J. SOLO, JR. Attorney (313) 235-9512

# FOR SETTLEMENT PURPOSES ONLY

Mark Palermo
Associate Regional Counsel
U.S. Environmental Protection Agency—Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: EPA's June 4, 2010 NOV

Dear Mr. Palermo:

Thank you for participating in the conference call with us on June 16, 2010 to discuss the allegations contained in EPA's June 4, 2010 Notice of Violation ("the NOV"). As was clear from our meeting, the parties sharply disagree as to whether recent work at Detroit Edison Company's ("Detroit Edison") Monroe Unit 2 constitutes a "major modification" under the New Source Review ("NSR") program of the Clean Air Act ("the CAA"). The Monroe plant is Detroit Edison's "flagship" facility; the units at that plant are being retrofitted with state-of-the-art pollution control equipment. In addition, Monroe Unit 2 is a relatively large unit (795 MW) and is therefore crucial to maintaining reserve margins and reliability, especially during the upcoming Summer months. Notwithstanding Detroit Edison's disagreement with EPA's conclusion regarding the project recently completed at Monroe Unit 2, Detroit Edison is pleased to discuss with EPA an offer to settle this NOV, as outlined below, and Detroit Edison continues to be interested in reaching a "global settlement" of EPA's NSR allegations regarding Detroit Edison's generating plants.

Before presenting its offer, Detroit Edison believes it necessary to restate its position regarding EPA's allegations and to address some of EPA's comments during the June 16 conference. As you know, Detroit Edison submitted a detailed planned outage notification on March 12, 2010 to the permitting authority, the Michigan Department of Natural Resources and the Environment ("MDNRE"). Even though the Monroe Unit 2 project was routine maintenance, repair and replacement under Michigan's NSR rules, Detroit Edison submitted to MDNRE an emissions increase analysis also demonstrating that the project would not result in a significant emissions increase. MDNRE is familiar with Detroit Edison's project notification policy; MDNRE did not question Detroit Edison's analysis or the project at the time it received Detroit Edison's notification; nor has MDNRE questioned the project since then. EPA, for its part, waited until the project was essentially complete to issue its June 4 NOV.

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Mark Palermo Page 2 June 23, 2010

Contrary to EPA's contentions, the recent work performed at Monroe Unit 2. which involved mainly economizer and superheater replacements, is not materially different than work that is commonly performed throughout the utility industry. Indeed, a district court in this Circuit recently held as much when considering nearly identical projects. See National Parks Conservation Ass'n et al. v. Tennessee Valley Authority, Case No. 3:01-CV-71, 2010 WL 1291335 (E.D. Tenn. Mar. 31, 2010), at \*26 ("The Court finds economizer replacements to be common in the industry."), 29 ("The Court finds superheater replacements to be common in the industry."). Moreover, EPA has yet to cite any evidence that Detroit Edison's work was non-routine. Rather, at the parties' conference, EPA simply pointed to projects performed long ago, and claimed that the Monroe Unit 2 work cannot be routine because it was larger and cost more than those projects. This is wrong. The Monroe Unit 2 project consisted of tube component replacements—the most common type of replacements in the utility industry. The scope of the project is similar to hundreds of similar projects undertaken in the utility industry for decades. Recognizing that this project was undertaken in 2010-not, say, 1988-the cost of the project is in line with similar tube component replacement projects throughout the utility industry. In short, the Monroe Unit 2 tube component replacements are no larger than many projects commonly performed throughout the industry. As the court in National Parks found, all four "WEPCo factors"-nature and extent, purpose, frequency, and cost—favored a finding that nearly identical projects were routine. Id. at \*24-31. MDNRE was right not to dispute Detroit Edison's determination that this work was routine, and Detroit Edison respectfully submits that EPA is wrong to suggest otherwise.

EPA is also wrong to suggest that the Monroe Unit 2 work will result in a significant increase in emissions as a result of the projects. Before commencing this work, Detroit Edison undertook an emissions analysis pursuant to the applicable Michigan rules, reasonably determined the work would not result in a significant increase in emissions, and submitted this determination to MDNRE. While EPA may disagree with Detroit Edison's determination, it has yet to explain Indeed, as Detroit Edison has explained, the analysis Detroit Edison submitted is similar to the project analyses it has been submitting to MDNRE for the past decade under the company's notification policy. These analyses, which apply the WEPCo Rule, the guidance provided to the Company by EPA in May 2000 regarding the Monroe turbine project, and the MDNRE's NSR rules, have been discussed with MDNRE. And EPA has been aware of these analyses and Detroit Edison's notification policy for some time, both from Detroit Edison's response to EPA's multiple Section 114 requests and, presumably, its oversight of Michigan's permitting program. Indeed, Detroit Edison raised its notification policy with EPA almost a year ago-at the September 25, 2009, conference following the July 24, 2009 NOV-and Detroit Edison specifically asked EPA to inform it if EPA disagrees with the way the company analyzes projects. Instead

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Mark Palermo Page 3 June 23, 2010

of responding, EPA sat by for almost a year and issued an NOV after the Monroe Unit 2 project was complete.

The attached chart further illustrates and confirms the conclusion of the Company's notification to MDNRE prior to the project, i.e., that there will be no significant increase in emissions due to the project. The chart provides the results of Detroit Edison's 2009 PROMOD runs in comparison to the 2005-2007 baseline period, and confirms that emissions and utilization projections are the product of independent factors such as demand and fuel prices, not tube replacements. DTE would be happy to meet with you to discuss all of our emission projections, to explain any questions you may have about how we make these projections under the guidance we have received from MDNRE, and to provide any further analyses as needed.

In addition, during the June 16 conference, proceeding on the assumption that the recent work at Monroe Unit 2 was a "major modification," EPA contended that any settlement of this NOV would have to include "mitigation" of "excess emissions" from the unit. Based on a follow-up e-mail from Apple Chapman dated June 17, 2010, EPA apparently measures "excess emissions" by the difference between annual emissions assuming heat input (utilization) during 2009 and current emission rates and what annual emissions supposedly would be in the future had Detroit Edison installed a scrubber and an SCR that would achieve emissions rates of 0.021 lb/mmBtu SO2 and 0.069 lb/mmBtu NOx, respectively. Both of EPA's premises are wrong. The emissions rates that EPA posits are short-term measures that are not demonstrated nor achievable in the long-term. Moreover, review of recent PSD permits, very few of which involve existing boilers, does not show emission rates of 0.021 lb/mmBTU SO2 nor 0.069 lb/mmBTU NOx.

As to the major premise of EPA's "excess emissions" calculation, even assuming the Monroe Unit 2 project could have triggered NSR, the proper measure of "excess emissions" is, at most, the amount of actual annual emissions following the project that exceed the baseline emissions, not some theoretical calculation based on nonexistent conditions. If the actual emissions of the unit do not exceed baseline levels, the project cannot possibly cause "excess emissions." This conclusion flows inexorably from the regulatory definition of "major modification" and is supported by practical reality. From a legal perspective, a "major modification" is a physical or operational change that causes a significant emissions increase. See Mich. Admin. Code. R. 336.2801. Therefore, on their face, the regulations define "excess emissions" by reference to baseline emissions, not some hypothetical unit that would have installed a scrubber and an SCR. As a practical matter, had Detroit Edison determined that the Monroe Unit 2 project could be a major modification, Detroit Edison would have avoided NSR altogether by taking a permit limit to ensure that annual-post project emissions do not exceed baseline emissions by more than the

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Mark Palermo Page 4 June 23, 2010

significance threshold. Indeed, no rational company would obtain an NSR permit that would require the installation of a scrubber and an SCR for an economizer/superheater project unless the utility was going to install these controls during the same outage for other reasons. Accordingly, the "excess emissions" (if any) are, at most, the difference between annual post-project emissions and baseline emissions.

Furthermore, an increase in actual, annual emissions cannot possibly occur until after at least one year of post-project operations, and given the current state of the economy in Michigan and other changes in forecast conditions since last year, Detroit Edison currently projects that utilization of Monroe Unit 2 during the course of the coming year will not exceed baseline for any reason, including independent factors such as demand. This further confirms that the Monroe Unit 2 projects are not modifications, and that there will be no adverse impact on the environment while settlement negotiations continue.

Notwithstanding the foregoing, Detroit Edison continues to be interested in a global settlement of EPA's NSR allegations for Detroit Edison's entire system, and also an early resolution of EPA's June 4, 2010 NOV if EPA's believes it important to address the latter in the interim. Thus, with the understanding that any controls and other requirements that the parties agree upon to resolve the June 4 NOV would be accounted for and eventually "credited" and incorporated into any global settlement between Detroit Edison and the government, Detroit Edison proposes the following framework for settling the June 4 NOV: Detroit Edison will install and operate a flue gas desulfurization unit (scrubber) on Monroe Unit 2 by December 31, 2014, and will proceed with plans to install and operate a selective catalytic reduction (SCR) unit on Monroe Unit 2 by the same date, although additional steps must be taken within Detroit Edison including potential permitting activity before installing and operating the SCR can be included in a formal commitment. Further, as a symbol of good faith and to alleviate any concern regarding any potential "real" emission increases from Monroe Unit 2, barring unforeseen circumstances, while pre-enforcement settlement discussions are voluntarily occurring, Detroit Edison will manage the operation of the unit to assure there is no increase in annual emissions above baseline levels for any reason whatsoever, including independent factors.

In conclusion, DTE believes that it would be most fruitful for the government and the company to negotiate a global settlement of EPA's NSR and other CAA allegations for Detroit Edison's entire system. There is no reason to single out the Monroe Unit 2 project, which is no different than hundreds of projects undertaken throughout the industry and at DTE, where DTE did what it is supposed to do in terms of analyzing the project for potential NSR applicability and submitting a pre-project notification to the permitting authority, and especially where there is no possible alleged harm that can result from these projects. Indeed, by managing the operations of the unit while good faith negotiations are

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Mark Palermo Page 5 June 23, 2010

proceeding, as described above, DTE will ensure that is the case. Nonetheless, Detroit Edison is willing to enter into an interim settlement of the June 4 NOV, as outlined above.

Very truly yours,

Michael J. Solo, Jr.

MJS/dmc Enclosure

cc: William Presson, MDNRE

Ethan Chatfield, EPA Region 5 Skiles Boyd, Detroit Edison

William Brownell, Detroit Edison Counsel

# FOR SETTLEMENT PURPOSES ONLY

The Detroit Edison Company, Monroe Power Plant

		NOx	SO2	PM	EAF	CF
	2010	6646	28153	NA		64.4
2009 PSCR PROMOD	2011	5752	27384	NA		62.7
Submittal	2012	6700	29401	NA		67.3
Jubiinttal	2013	6494	26653	NA		65.8
	2014	6168	1635	NA		65.2
May, 2005 to April, 2007		9097	28989	482	85.5	72.2

PROMOD Run in 2009 did not include PM emissions, they were calculated by EM&R using heat inputs and previous years PM emission rate.

# EXHIBIT 2 TO DEFENDANTS' BRIEF IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT BASED ON THE 2002 NSR REFORM RULES

# UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF MICHIGAN

UNITED STATES OF AMERICA,

Plaintiff,

And

NATURAL RESOURCES DEFENSE COUNCIL, INC. AND SIERRA CLUB,

Intervenor-Plaintiffs,

v.

DTE ENERGY COMPANY AND DETROIT EDISON COMPANY,

Defendants.

Civil Action No. 2:10-cv-13101-BAF-RSW

Judge Bernard A. Friedman

Magistrate Judge R. Steven Whalen

# **DECLARATION OF GORDON P. USITALO**

- I, Gordon P. Usitalo, state that the following facts are true to the best of my knowledge, information, and belief:
- 1. My name is Gordon P. Usitalo. I am the Manager, Fossil Generation Strategic Planning, for Detroit Edison Company.
- 2. In connection with my job responsibilities, I have personal knowledge concerning the processes that Detroit Edison has put in place to monitor emissions at its generating units, including emissions from Monroe Unit 2. Detroit Edison monitors emissions continuously and summarizes emissions levels at each unit on a monthly basis. Each month, Detroit Edison tabulates year to date emissions at each unit, and uses projected emissions for future months to project overall emissions at a unit for the year.
- 3. During the course of calendar year 2011, for Monroe Unit 2, Detroit Edison has monitored and recorded emissions of NOx, SO<sub>2</sub> and PM and has recorded data concerning

Capacity Factor. For Monroe Unit 2, the following table summarizes year to date data, through May:

	<u>Actual</u>	Prorated Baseline <sup>1</sup>
CF, %	67.7	72.1
NOx, Tons	3,329	4,332
$SO_2$ , Tons	10,289	12,548
PM, Tons	178	208

The following table summarizes projected year-end data for Monroe Unit 2 in comparison to relevant NSR baselines:

	<u>Actual</u>	<u>Baseline</u>
CF, %	69.7	72.1
NOx, Tons	7,495	10,398
$SO_2$ , Tons	26,510	30,115
PM, Tons	455	498

4. During the course of calendar year 2010, for Monroe Unit 2, Detroit Edison monitored and recorded emissions of NOx, SO<sub>2</sub> and PM and has recorded data concerning Capacity Factor. For Monroe Unit 2, the following table summarizes this data for the period June 2010 through December 2010, i.e., the period following the return of Monroe Unit 2 to operation after the March 2010 Outage:

	<u>Actual</u>	<b>Prorated Baseline</b> <sup>1</sup>
CF, %	57.6	72.1
NOx, Tons	4,064	6,065
$SO_2$ , Tons	13,555	17,567
PM, Tons	225	290

\* \* \*

<sup>&</sup>lt;sup>1</sup> Prorated baseline is provided for comparison purposes only. NSR baselines are yearly averages.

# 2:10-cv-13101-BAF-RSW Doc # 107-3 Filed 06/09/11 Pg 4 of 4 Pg ID 4762

I declare under penalty of perjury that the foregoing is true and correct.

Dated: 6 - 9 - 11

Gordon P. Usitalo